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

FORM 10-K

(MARK ONE)
[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES AND EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 1998

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM

---------- TO ---------- .

COMMISSION FILE NUMBER: 0-19311

IDEC PHARMACEUTICALS CORPORATION
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	33-0112644
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

11011 TORREYANA ROAD, SAN DIEGO, CALIFORNIA 92121
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES) (ZIP CODE)

(619) 550-8500
(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: COMMON STOCK, $.001 PAR VALUE
(TITLE OF CLASS)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

As of January 29, 1999, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately $967,711,000. (Based upon the "closing" price as reported by The Nasdaq Stock Market on January 29, 1999). This number is provided only for the purposes of this report and does not represent an admission by either the Registrant or any such person as to the status of such person.

As of January 29, 1999, the Registrant had 20,198,378 shares of its common stock, $.001 par value, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999 are incorporated by reference into Part III.

IDEC PHARMACEUTICALS CORPORATION
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 1998

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RISK FACTORS

This Form 10-K contains forward-looking statements that involve a number of risks and uncertainties. You should be aware that such statements are projections or estimates as to future events, which may or may not occur.

In addition to the other information in this Form 10-K, you should carefully consider the following risk factors. If any of these risks actually occur, our business, financial condition and results of operations could be materially adversely affected. The risks and uncertainties described below are not the only ones facing our company, and additional risks and uncertainties may also impair our business operations.

OUR REVENUES RELY SIGNIFICANTLY ON RITUXAN(R) SALES

Our revenues currently depend largely upon continued U.S. sales of a single commercialized product, Rituxan. We cannot be certain that Rituxan will continue to be accepted in the United States or in any foreign markets. A number of factors may affect the rate and level of market acceptance of Rituxan, including:

- the perception by physicians and other members of the health care community of its safety and efficacy or that of competing products, if any;
- the effectiveness of our and Genentech Inc.'s ("Genentech") sales and marketing efforts in the United States and the effectiveness of F. Hoffmann-La Roche, Inc.'s ("Roche") sales and marketing efforts in Europe;
- unfavorable publicity concerning Rituxan or comparable drugs;
- its price relative to other drugs or competing treatments;
- the availability of third party reimbursement; and
- regulatory developments related to the manufacture or continued use of Rituxan.

We incurred annual operating losses from our inception in 1985 through fiscal 1997. Given our current reliance upon Rituxan as the principal source of our revenue, any material adverse developments with respect to the commercialization of Rituxan may cause us to incur losses in the future.

OUR OPERATING RESULTS ARE SUBJECT TO SIGNIFICANT FLUCTUATIONS

Our quarterly revenues, expenses and operating results have fluctuated in the past and are likely to fluctuate significantly in the future. Fluctuation may result from a variety of factors, including:

- our achievement of product development objectives and milestones;
- demand and pricing for our commercialized products, such as Rituxan;
- our ability to utilize excess manufacturing capacity by obtaining contract manufacturing relationships;
- timing and nature of contract manufacturing and contract research and development payments and receipts;
- hospital and pharmacy buying decisions;
- clinical trial enrollment and expenses;
- physician acceptance of our products;
- government or private healthcare reimbursement policies;
- our manufacturing performance and capacity and that of our partners;
- rate and success of product approvals;
- collaboration obligations and copromotion payments we make or receive;

- foreign currency exchange rates; and

- overall economic conditions.

Our operating results during any one quarter do not necessarily suggest those of future quarters. These results fluctuate periodically because our revenues are driven by certain events such as achievement of product development milestone events and the applicable profit sharing allocation between us and Genentech, based upon our copromotion arrangement.

VOLATILITY OF OUR STOCK PRICE

The market prices for our common stock and for securities of other companies engaged primarily in biotechnology and pharmaceutical development, manufacture and distribution are highly volatile. For example, the market price of our common stock fluctuated between $17 1/4 per share and $50 1/2 per share during the twelve months ended January 29, 1999. The market price of our common stock will likely continue to fluctuate due to a variety of factors, including:

- material public announcements;

- the announcement and timing of new product introductions by us or others;

- technical innovations or product development by us or our competitors;

- regulatory approvals or regulatory issues;

- developments relating to patents, proprietary rights and orphan drug status;

- actual or potential clinical results with respect to our products under development or those of our competitors;

- political developments or proposed legislation in the pharmaceutical or healthcare industry;

- hedge and/or arbitrage activities by holders of our 20-year zero coupon subordinated convertible notes ("Notes");

- period to period fluctuations in our financial results; and

- market trends relating to our industry.

WE FACE UNCERTAIN RESULTS OF CLINICAL TRIALS OF OUR POTENTIAL PRODUCTS

Our future success depends in large part upon the results of clinical trials designed to assess the safety and efficacy of our potential products. The completion rate of these clinical trials depends significantly upon the rate of patient enrollment. Factors that affect patient enrollment include:

- size of patient population for the targeted disease;

- eligibility criteria;

- proximity of eligible patients to clinical sites;

- clinical trial protocols; and

- the existence of competing protocols (including competitive financial incentives for patients and clinicians) and existing approved drugs (including Rituxan).

Our inability to enroll patients on a timely basis could result in increased expenses and product development delays, which could have a material adverse effect on our business, results of operations and financial condition. Even if a trial is fully enrolled, significant uncertainties remain as to whether it will prove successful.

The U.S. Food and Drug Administration ("FDA") regulates clinical trials. Failure to comply with extensive FDA regulations may result in delay, suspension or cancellation of a trial and/or the FDA's refusal

to accept test results. The FDA may also suspend our clinical trials at any time if it concludes that the participants are being exposed to unacceptable risks. Consequently, we cannot ensure that Phase I, Phase II or Phas III testing will be completed timely or successfully, if at all, with respect to any of our potential products. Furthermore, we cannot be certain that patients enrolled in our clinical trials will respond to our product candidates, that any product candidate will be safe and effective or that data derived from the trials will be suitable for submission to the FDA or satisfactorily support a biologics licensing application ("BLA") or a new drug application ("NDA").

WE MAY BE UNABLE TO DEVELOP AND COMMERCIALIZE NEW PRODUCTS

Our future results of operations will depend to a large extent upon our ability to successfully commercialize new products in a timely manner. As a result, we must continue to develop, test and manufacture new products and then must meet regulatory standards and obtain regulatory approvals. Our products currently in development may not receive the regulatory approvals necessary for marketing in a timely manner, if at all. Additionally, the development and commercialization process is time-consuming and costly, and we cannot be certain that any of our products, if and when developed and approved, will be successfully commercialized. Delays or unanticipated costs in any part of the process, our inability to obtain regulatory approval for our products or to maintain manufacturing facilities in compliance with all applicable regulatory requirements could adversely affect our results of operations.

WE RELY HEAVILY ON CONTRACT MANUFACTURERS

We rely heavily upon third party manufacturers to manufacture significant portions of our products and product candidates. Our own manufacturing capacity is limited and we are capable of producing only a limited quantity of bulk Rituxan and other product candidates. Our manufacturing experience to date has been limited to the production of preclinical and clinical quantities of product candidates and to approximately two years of commercial production of bulk Rituxan. We have no fill/finish experience or capacity and we do not have experience in the field of chemical manufacturing for small molecule drugs and therefore, we rely entirely upon third parties for the manufacture of these drugs. Consequently, we cannot ensure that either our manufacturing facilities or our ability to sustain ongoing production of our products will be able to meet our expectations. Nor can we be certain that we will be able to enter into satisfactory agreements with third party manufacturers. Our failure to enter into agreements with such manufacturers on reasonable terms, if at all, or poor manufacturing performance on our part or that of our third party manufacturers could have a material and adverse effect on our business, financial condition and results of operations.

We are in the process of completing a modification to our collaborative agreement with Genentech that will allow us to terminate early our obligations to supply to Genentech bulk Rituxan manufactured at our facility. Rather than supplying bulk Rituxan to Genentech through November 1999, we now anticipate transferring all manufacturing responsibilities for bulk Rituxan to Genentech at the end of the third quarter of 1999. We currently manufacture bulk Rituxan at a cost in excess of a fixed price, thereby decreasing our margins on revenue received under the copromotion arrangement, and we expect this condition to continue until such time as we transfer all of the manufacturing of bulk Rituxan to Genentech. We rely upon Genentech to provide a majority of Rituxan manufacturing in order to meet worldwide requirements and to complete all fill/finish requirements and we will rely on Genentech for all Rituxan manufacturing after the transfer is completed. We cannot ensure that Genentech will manufacture and fill/finish Rituxan in sufficient quantities and on a timely and cost-effective basis or that Genentech will obtain and maintain all required manufacturing approvals. Genentech's failure to manufacture and fill/finish Rituxan or obtain and maintain required manufacturing approvals could materially and adversely affect our business, results of operations and financial condition.

We also rely upon SmithKline Beecham, p.l.c. ("SB") to fulfill all our manufacturing requirements for IDEC-151. Our IDEC-Y2B8 product has multiple components that require successful coordination among several third party contract manufacturers. We are currently negotiating with commercial contractors to meet our long-term manufacturing demands for yttrium and fill/finish of IDEC-Y2B8 bulk product. Upon the completion in 1999 of our obligation to manufacture bulk Rituxan, we will undertake conversion of our

manufacturing facility to a multi-product facility, where we will initially manufacture IDEC-Y2B8 and anti-gp39 antibodies. We cannot be certain that this conversion will be successful, that it will receive all necessary regulatory approvals, or that, even if it is successful and such approvals are received, it will be completed within our budgeted time and expense estimations. Our failure to successfully convert the manufacturing facility in a timely manner could have an adverse effect on our product development efforts and our ability to timely file our product license applications and could cause us to incur significant unabsorbed overhead costs. To the extent we cannot produce our own biologics, we will need to rely on third party manufacturers, and we believe that there are only a limited number of manufacturers capable of manufacturing biologics as contract suppliers.

Because of our lack of experience in and facilities for small molecule chemical manufacturing, we will need to establish a long-term manufacturing arrangement for 9-aminocamptothecin ("9-AC") with a third party contract manufacturer. We cannot be certain that we will reach agreement on reasonable terms, if at all, with those manufacturers or that the integration of our contract manufacturers can be successfully coordinated.

WE RELY HEAVILY ON CERTAIN SUPPLIERS

Some materials used in our products and potential products, including Rituxan and IDEC-Y2B8, are currently available only from sole or limited number of suppliers. In addition, the suppliers of some materials for our products must be approved by the FDA and/or by other governmental agencies. Although we have initiated a program for identifying alternative suppliers for certain materials, any interruption or delay in our supply of materials or delays in the applicable governmental approval of new suppliers or any loss of a sole source supplier could have a material adverse effect on our business, financial condition and results of operations.

OUR INDUSTRY IS INTENSELY COMPETITIVE

The biotechnology industry is intensely competitive. We compete with biotechnology and pharmaceutical companies that have been established longer than we have, have a greater number of products on the market, have greater financial and other resources and have other technological or competitive advantages. We also compete in the development of technologies and processes and in acquiring personnel and technology from academic institutions, government agencies, and other private and public research organizations. Consequently, we cannot be certain that we will be able to produce or acquire rights to new products with commercial potential. In addition, we cannot be certain that one or more of our competitors will not receive patent protection that dominates, blocks or adversely affects our product development or business; will benefit from significantly greater sales and marketing capabilities; or will not develop products that are accepted more widely than ours. We are aware that a competitor is in late stage clinical trials with a radiolabeled murine antibody for the treatment of low-grade non-Hodgkin's lymphomas ("NHL").

WE HAVE LIMITED SALES AND MARKETING EXPERIENCE

We have limited experience with commercial sales and marketing, based entirely upon our launch and subsequent sales of Rituxan. Outside the United States, our strategy is to pursue and to rely solely upon collaborations with established pharmaceutical companies for marketing, distribution and sale of our products. We have no plans to directly market outside the United States. Since we currently rely upon copromotion partners in the United States and rely exclusively on third parties outside the United States, we cannot be certain that our products will be marketed and distributed in accordance with our expectations or that our market research or sales forecasts will be accurate. We also cannot be certain that we will ever be able to develop our own sales and marketing capabilities to an extent that we would not need to rely on third party efforts, or that we will be able to maintain satisfactory arrangements with the third parties on whom we rely.

WE MAY BE UNABLE TO ADEQUATELY PROTECT OR ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS OR SECURE RIGHTS TO THIRD PARTY PATENTS

Our ability to obtain and maintain patent and other protection for our products will affect their success. We are assigned or have rights to or have exclusive access to a number of U.S. and foreign patents, patents pending and patent applications. However, we cannot be certain that such patent applications will be approved, or that any of our patent rights will be upheld in a court of law if challenged. We also cannot be certain that our patent rights will provide competitive advantages for our products or will not be challenged, infringed upon or circumvented by our competitors.

Because of the large number of patent filings in the biopharmaceutical field, our competitors may have filed applications or been issued patents and may obtain additional patents and proprietary rights relating to products or processes competitive with or similar to ours. We cannot be certain that U.S. or foreign patents do not exist or will not issue that would materially and adversely affect our ability to commercialize our products and product candidates.

In addition to patents, we rely on trade secrets and proprietary know-how that we seek to protect, in part, through confidentiality agreements with our partners, employees and consultants. It is possible that such parties will breach our agreements or that courts may not enforce the agreements, leaving us without adequate remedies. We also cannot be certain that our trade secrets will not become known or be independently developed or patented by our competitors.

We are aware of several third party patents and patent applications (to the extent they issue as patents) that, if successfully asserted against us, may materially affect our ability to make, use, offer to sell, sell and import our products. These third party patents and, patent applications may include, without limitation:

- U.S. patent applications and foreign counterparts filed by Bristol-Myers Company that disclose antibodies to a B7 antigen;

- a U.S. patent assigned to Columbia University, which the Company believes has been exclusively licensed to Biogen, related to monoclonal antibodies to the 5C8 antigen found on T cells. The Company believes the 5C8 antigen and gp39, the target for the Company's anti-gp39 antibodies and its collaboration with Eisai Co., Ltd. ("Eisai"), are the same protein expressed on the surface of T cells;

- a number of issued U.S. and foreign patents that relate to various aspects of radioimmunotherapy of cancer and to methods of treating patients with anti-CD4 antibodies; and

- three U.S. patents, assigned to Burroughs Wellcome, relating to therapeutic uses of CHO glycosylated antibodies.

The owners, or licensees of the owners, of these patents and patent applications (to the extent they issue as patents) may assert that one or more of our products infringe one or more claims of such patents. Such owners or licensees of foreign counterparts to these patents and any other foreign patents may assert that one or more of our products infringe one or more claims of such patents. Specifically, if legal action is commenced against us to enforce any of these patents and patent applications (to the extent they issue as patents) and the plaintiff in such action prevails, we could be prevented from practicing the subject matter claimed in such patents or patent applications.

If our intellectual property rights are challenged, we may be required or may desire to obtain licenses to patents and other intellectual property held by third parties to develop, manufacture and market our products. However, we cannot be certain that we will be able to obtain these licenses on commercially reasonable terms, if at all, or that any licensed patents or intellectual property will be valid or enforceable. In addition, the scope of intellectual property protection is subject to scrutiny and change by courts and other governmental bodies. Litigation and other proceedings concerning patents and proprietary technologies can be protracted, expensive and distracting to management and companies may sue competitors as a way of delaying the introduction of competitors' products. Any litigation, including any interference proceeding to determine priority of inventions and oppositions to patents in foreign countries, may be costly and time-consuming and could have a material

adverse effect on our business, financial condition and results of operations. See "Item 1. Business -- Patents and Proprietary Technology."

WE MAY BE UNABLE TO MAINTAIN THIRD PARTY RESEARCH AND DEVELOPMENT RELATIONSHIPS

Funding of research and development efforts depend largely upon various arrangements with strategic partners and others who provide us with funding and who perform research and development with respect to our products. Such strategic partners may generally terminate their arrangement with us at any time. These parties may develop products that compete with ours, and we cannot be certain that they will perform their contractual obligations or that any revenues will be derived from such arrangements. If one or more of our strategic partners fail to achieve certain product development objectives, such failure could have a material adverse effect on our ability to fund related programs and develop products.

FAILURE TO OBTAIN PRODUCT APPROVALS OR COMPLY WITH GOVERNMENT REGULATIONS COULD ADVERSELY AFFECT OUR BUSINESS

As pharmaceutical manufacturers, our partners and we are subject to extensive, complex, costly and evolving governmental rules, regulations and restrictions administered by the FDA, by other federal and state agencies, and by governmental authorities in other countries. In the United States, our products cannot be marketed until after they are approved by the FDA. Obtaining an FDA approval involves the submission, among other information, of the results of preclinical and clinical studies on the product, and requires substantial time, effort and financial resources. Rituxan is our only product that has received FDA approval, and we cannot be certain that any of our product candidates will be approved either in the United States or in other countries in a timely fashion, if at all. Both before and after approval, we are subject to numerous other FDA requirements, and to government inspection at all times. Our failure to meet or comply with any rules, regulations or restrictions of the FDA or other agencies could result in fines, unanticipated expenditures, product delays, non-approval or recall, interruption of production and even criminal prosecution. Although we have instituted internal compliance programs, we cannot be certain that such programs will meet regulatory agency standards or that any lack of compliance will not have a material adverse effect on our business, financial condition or results of operations.

OUR BUSINESS EXPOSES US TO PRODUCT LIABILITY CLAIMS

Our design, development and manufacture of products involves an inherent risk of exposure to product liability claims and related adverse publicity. Insurance coverage is expensive and difficult to obtain, and we may be unable to obtain coverage in the future on acceptable terms, if at all. Although we currently maintain product liability insurance for our products in the amounts we believe to be commercially reasonable, we cannot be certain that the coverage limits of our insurance policies or those of our strategic partners will be adequate. If we are unable to obtain sufficient insurance at an acceptable cost or if a claim is brought against us, whether fully covered by insurance or not, our business, results of operations and financial condition could be materially adversely affected.

FAILURE TO ADEQUATELY ADDRESS THE YEAR 2000 ISSUE COULD ADVERSELY AFFECT OUR BUSINESS

We have assessed and continue to assess the potential impact of the situation commonly referred to as the Year 2000 Issue. The Year 2000 Issue concerns the inability of many information systems and computer software products to properly recognize and process date sensitive information related to the year 2000 and beyond. As a result information systems and computer software used by many companies may need to be modified and upgraded.

We have several information improvement initiatives underway and have appointed a program manager for our Year 2000 program. We have completed an initial inventory and review of all system hardware, operating systems (including manufacturing and laboratory control systems) and application software in order to identify potential Year 2000 problems and we have developed plans for and have begun implementing upgrades and testing in many systems. Our plan includes sending inquiries to our major third party suppliers

and partners seeking comfort that they are Year 2000 compliant. We do not know the financial impact of making the required system and software modifications, but we currently expect the cost to be less than $2.0 million. However, we cannot be certain that the actual cost of correcting the Year 2000 Issue will not exceed this estimate. Our business, financial condition and results of operations could be materially adversely affected if third party suppliers, manufacturers, service providers and other entities do not adequately address their Year 2000 Issues or if we at the company fail to successfully complete our initiatives.

We are currently relying upon Genentech to provide for all Year 2000-related contingency plans relating to the manufacture and sale of Rituxan; however, we have not received such contingency plan from Genentech. Genentech anticipates that contingency planning will begin in the first quarter of 1999. Any failure by Genentech to address issues which would result in their inability to timely produce Rituxan would have a material adverse impact on our business. Additionally, we currently have no contingency plans to deal with any Rituxan or non-Rituxan related failures resulting from the Year 2000 issue. We expect to develop contingency plans during the second quarter of 1999.

WE MAY BE UNABLE TO RAISE ADDITIONAL CAPITAL OR TO REPURCHASE THE ZERO COUPON SUBORDINATED CONVERTIBLE NOTES

We expend and will likely continue to expend substantial funds to complete the research, development, manufacturing and marketing of our potential future products. Consequently, we may seek to raise capital through collaborative arrangements, strategic alliances, and/or equity and debt financings or from other sources. We may be unable to raise additional capital on commercially acceptable terms, if at all, and if we raise capital through equity financing then existing stockholders may have their ownership interests diluted. If we are unable to generate adequate funds from operations or from additional sources, then our business, results of operations and financial condition may be materially and adversely affected.

If we undergo certain events constituting a change of control prior to February 16, 2004, we will be obligated to repurchase all outstanding Notes at the option of the holder. However, it is possible that we will not have sufficient funds at that time, will not be able to raise sufficient funds, or that restrictions in our indebtedness will not allow such repurchases. In addition, certain major corporate events that would increase our indebtedness, such as leveraged recapitalizations, would not constitute a change of control under the Indenture.

FUTURE TRANSACTIONS MAY ADVERSELY AFFECT OUR BUSINESS OR THE MARKET PRICE OF SECURITIES

We regularly review potential transactions related to technologies, products or product rights and businesses complementary to our business. Such transactions could include mergers, acquisitions, strategic alliances, off-balance sheet financings, licensing agreements or copromotion agreements. We may choose to enter into one or more of such transactions at any time, which may cause substantial fluctuations to the market price of securities that we have issued. Moreover, depending upon the nature of any transaction, we may experience a charge to earnings, which could also have a material adverse impact upon the market price of securities that we have issued.

WE RELY UPON CERTAIN KEY PERSONNEL

Our success will depend, to a great extent, upon the experience, abilities and continued services of our executive officers and key scientific personnel. We do not carry key-man life insurance on any of our officers or personnel. If we lose the services of any of these officers or key scientific personnel, we could suffer a material adverse effect on our business, financial condition and results of operations. Our success also will depend upon our ability to attract and retain other highly qualified scientific, managerial, sales and manufacturing personnel and our ability to develop and maintain relationships with qualified clinical researchers. Competition for such personnel and relationships is intense and we compete with numerous pharmaceutical and biotechnology companies as well as with universities and non-profit research organizations. We cannot be certain that we will be able to continue to attract and retain qualified personnel or develop and maintain relationships with clinical researchers.

WE ARE SUBJECT TO UNCERTAINTIES REGARDING HEALTH CARE REIMBURSEMENT AND REFORM

Our ability to commercialize products depends in part on the extent to which patients are reimbursed by governmental agencies, private health insurers and other organizations, such as health maintenance organizations ("HMOs"), for the cost of such products and related treatments. Our business, results of operations and financial condition could be materially adversely affected if health care payers and providers implement cost-containment measures and governmental agencies implement healthcare reform.

OUR BUSINESS INVOLVES ENVIRONMENTAL RISKS

Our business and the business of several of our strategic partners, including Genentech, involves the controlled use of hazardous materials, chemicals, biologics and radioactive compounds. Biologics manufacture is extremely susceptible to product loss due to microbial or viral contamination, material equipment failure, or vendor or operator error. Although we believe that our safety procedures for handling and disposing of such materials complies with state and federal standards, there will always be the risk of accidental contamination or injury. In addition, certain microbial or viral contamination may cause the closure of the respective manufacturing facility for an extended period of time. By law, radioactive materials may only be disposed of at state approved facilities. We currently store our radioactive materials on-site because the approval of a disposal site in California for all California-based companies has been delayed indefinitely. If and when a disposal site is approved, we may incur substantial costs related to the disposal of such material. If liable for an accident, or if we suffer an extended facility shutdown, we could incur significant costs, damages and penalties that could have a material adverse effect on our business, financial condition and results of operations.

THE ZERO COUPON SUBORDINATED CONVERTIBLE NOTES LEVERAGED US CONSIDERABLY

As a result of issuing the Notes in February 1999, we raised approximately $113.1 million in cash by incurring indebtedness of $345.0 million at maturity. As a result of this indebtedness, our principal and interest obligations will increase substantially. The degree to which we are leveraged could materially adversely affect our ability to obtain future financing and could make us more vulnerable to industry downturns and competitive pressures. Our ability to meet our debt obligations will be dependent upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. The holders of the Notes may require us to purchase the Notes on February 16, 2004, 2009 or 2014 at a price equal to the issue price plus accrued original issue discount to the date of purchase. We have the option to repay the Notes plus accrued original issue discount in cash, our common stock or a combination thereof.

In addition, in the event of our insolvency, bankruptcy, liquidation, reorganization, dissolution or winding up or upon our default in payment with respect to any indebtedness or an event of default with respect to such indebtedness resulting in the acceleration thereof, our assets will be available to pay the amounts due on the Notes only after all our senior indebtedness has been paid in full. Moreover, holders of common stock would only receive the assets remaining after payment of all indebtedness and preferred stock, if any.

WE HAVE ADOPTED SEVERAL ANTITAKEOVER MEASURES AND THE ZERO COUPON SUBORDINATED CONVERTIBLE NOTES MAY HAVE FURTHER ANTITAKEOVER EFFECT

We have taken a number of actions that could have the effect of discouraging a takeover attempt that might be beneficial to stockholders who wish to receive a premium for their shares from a potential bidder. For example, we reincorporated into Delaware, which subjects us to Section 203 of the Delaware General Corporation Law, providing that the Company may not enter into a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in the manner prescribed in the code section. In addition, we have adopted a Stockholder Rights Plan that would cause substantial dilution to a person who attempts to acquire our company on terms not approved by our Board of Directors. In addition, our Board of Directors has the authority to issue, without vote or action of stockholders, up to 8,000,000 shares of preferred stock and to fix the price, rights, preferences and privileges of those shares. Any such preferred

stock could contain dividend rights, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences or other rights superior to the rights of holders of common stock. The Board of Directors has no present intention of issuing any additional shares of preferred stock (approximately 227,514 shares of non-voting convertible preferred stock were outstanding as of December 31, 1998), but reserves the right to do so in the future. In addition, our copromotion arrangement with Genentech provides Genentech with the option to buy the rights to Rituxan in the event that we undergo a change of control, which may limit our attractiveness to potential acquirors.

We are required by the terms of the Notes, as of 35 business days after a change in control occurring on or before February 16, 2004, to purchase any Note at the option of its holder and at a price equal to the issue price plus accrued original issue discount to the date of repurchase. This feature of the Notes may have an antitakeover effect.

WE HAVE NOT PAID AND DO NOT PLAN TO PAY DIVIDENDS

We have never declared or paid cash dividends on our common stock. We currently plan to retain any earnings for use in our business and therefore do not anticipate paying any dividends in the future.

PART I

ITEM 1. BUSINESS

OVERVIEW

IDEC Pharmaceuticals Corporation ("IDEC Pharmaceuticals" or the "Company") is a biopharmaceutical company engaged primarily in the research, development and commercialization of targeted therapies for the treatment of cancer and autoimmune and inflammatory diseases. Our first commercial product, Rituxan, and our most advanced product candidate, IDEC-Y2B8, are for use in the treatment of certain B-cell NHLs. B-cell NHLs currently afflict approximately 260,000 patients in the United States. We are also developing products for the treatment of certain solid tumor cancers and various autoimmune diseases (such as lupus and psoriasis). Solid tumor cancers are diagnosed in approximately 1,100,000 new patients each year, and lupus and psoriasis together currently afflict approximately 5,600,000 patients in the United States.

In November 1997, Rituxan became the first monoclonal antibody approved by the FDA for a cancer therapy indication. Since that time, Rituxan, marketed pursuant to a copromotion arrangement between us and Genentech, achieved U.S. net sales of approximately $157.2 million through December 31, 1998, making it the best-selling (based on first-year dollar volume sales) cancer drug ever approved for marketing in the United States. In June 1998, Roche received approval to begin marketing Rituxan (under the trade name MabThera) in the fifteen European Union countries. To date, Roche has launched MabThera in nine of these countries, and we receive a royalty on sales of MabThera. Pricing approval is still pending in some European Union countries.

Delivered intravenously as a treatment for B-cell NHL, Rituxan offers a favorable side effect profile. Treatment with Rituxan is given as four weekly intravenous infusions over a twenty-two day period as compared to chemotherapy, which is typically given in repeated cycles for up to four to eight months. Thus, Rituxan offers the possibility of increased quality of life during the treatment of cancer, while maintaining a response rate that compares favorably with conventional treatments. In its pivotal Phase III clinical trial involving 166 evaluable patients, Rituxan, administered as a single agent achieved a partial (at least 50% tumor shrinkage) or complete response to therapy in forty-eight percent (48%) of patients on an intent to treat basis (80 of 166 patients). Eighty-seven percent of evaluable patients demonstrated at least a quantifiable shrinkage in tumor size. For the 80 patients achieving a partial or complete response, the median time of regrowth of the tumor was 11.6 months from the onset of response, and the Company believes 19 of such 80 patients are experiencing ongoing remissions. Because of its favorable safety profile, the Company believes that Rituxan is a strong candidate for combination therapy, and the Company is currently researching its possible uses in this role.

BACKGROUND INFORMATION

In order to better analyze the Company's business and its prospects, it is helpful to understand the field in which the Company operates, including the general manner in which the Company's products and product candidates interact with people's bodies and, in particular, with the diseases that its products and product candidates are designed to target. Each of the following subsections provides background information which is important to gaining an understanding of the Company's products and product candidates:

- Antibodies and the Immune System. The immune system is composed of specialized cells, including B cells and T cells, that function in the recognition, destruction and elimination of disease causing foreign substances and of virally infected or malignant cells. The role of these specialized cells is determined by receptors on the cell surface which govern the interaction of the cell with foreign substances and with the rest of the immune system. For example, each differentiated B cell of the immune system has a different antibody anchored to its surface that serves as a receptor to recognize foreign substances. This antibody then triggers the production of additional antibodies which, as free-floating molecules, bind to and eliminate these foreign substances. Each foreign substance is individually

identifiable by structures on its surface known as antigens, which serve as binding sites for the specific antibodies. T cells play more diverse roles, including the identification and destruction of virally infected or malignant cells.

A variety of technologies have been developed to produce antibodies as therapeutic agents. These include hybridoma technology and molecular biology techniques such as gene cloning and expression, which can now be applied to the generation, selection and production of hybrid monoclonal antibody varieties known as chimeric and humanized antibodies, as well as strictly human antibodies. Chimeric antibodies are constructed from portions of non-human species (typically mouse) antibodies and human antibodies. In these applications, the portion of the antibody responsible for antigen binding (the "variable region") is taken from a non-human antibody and the remainder of the antibody (the "constant region") is taken from a human antibody. Compared to mouse ("murine") monoclonal antibodies, chimeric antibodies generally exhibit lower immunogenicity (the tendency to trigger an often adverse immune response such as a human anti-mouse antibody, or "HAMA" response), are cleared more slowly from the body, and function more naturally in the human immune system. Humanized antibodies can be constructed by grafting several small pieces of a murine antibody's variable region onto a constant region framework provided by a human antibody. This process, known as "CDR grafting," reduces the amount of foreign materials in the antibody, rendering it closer to a human antibody. However, the construction of humanized antibodies by CDR grafting requires complex computer modeling, and the properties of the resulting antibody are not completely predictable and may, in fact, still trigger a HAMA response.

- B-Cell Non-Hodgkin's Lymphomas. As with other cell types in the body, B cells and T cells may become malignant and grow as immune system tumors, such as B-cell NHLs. B-cell NHLs are cancers of the immune system which currently afflict approximately 260,000 patients in the United States. Treatment alternatives for B-cell NHL patients include chemotherapy, radiation therapy, and more recently, the Company's Rituxan that is indicated for use in relapsed or refractory, low grade or follicular, CD20 positive, B-cell NHL. B-cell NHLs are diverse with respect to prognosis and treatment, and are generally classified into one of three groups (low, intermediate or high grade) based on histology and clinical features. These three groups are further subdivided by the International Working Formulation ("IWF") into subclasses A through J: low grade (A, B and C); intermediate grade (D, E, F and G); and high grade (H, I and J). Low grade or follicular B-cell NHL is comprised of IWF subclasses A through D. The Company estimates that approximately half of the 260,000 patients afflicted with B-cell NHL in the United States have low grade or follicular disease. Of such patients afflicted with low grade or follicular B-cell NHL in the United States, approximately 20,000 will have been diagnosed during the past 12 months. Patients with low grade lymphomas have a fairly long life expectancy from the time of diagnosis (median survival 6.6 years), despite the fact that low grade NHLs are almost always incurable. Intermediate grade and high grade lymphomas are more rapidly growing forms of these cancers, which in some cases can be cured with early, aggressive chemotherapy. New diagnoses of NHLs have increased approximately 6% annually since 1982, with 55,400 new diagnoses in the United States estimated for 1998. The increase is due in part to the aging of the population and to the increasing prevalence of lymphomas in the AIDS patient population. In approximately 90% of the cases in the United States, non-Hodgkin's lymphomas are of B-cell origin, the remainder is of T-cell origin.

Owing to the fluid nature of the immune system, B-cell lymphomas are usually widely disseminated and characterized by multiple tumors at various sites throughout the body at first presentation. Treatment courses with chemotherapy or radiation therapy often result in a limited number of remissions for patients with B-cell lymphomas. The majority of patients in remission will relapse and ultimately die either from their cancer or from complications of standard therapy. Fewer patients achieve additional remissions following relapse and those remissions are generally of shorter duration as the tumors become increasingly resistant to subsequent courses of chemotherapy. Therapeutic product development efforts for these cancers have focused on both improving treatment results and minimizing the toxicities associated with standard treatment regimens. Immunotherapies with low toxicity and demonstrated efficacy, such as Rituxan, might be expected to reduce treatment and hospitalization costs associated with

side effects or opportunistic infections, which can result from the use of chemotherapy and radiation therapy.

- Solid Tumor Cancers. Solid tumor cancers are comprised primarily of non-hematologic malignancies and, according to American Cancer Society estimates, approximately 1.1 million new cases were diagnosed in 1998. The five most frequently diagnosed solid tumor cancers in the United States account for 59% of all cancers (722,300 new cases) and include prostate (184,500), breast (180,300), lung (171,500), colorectal (131,600) and bladder (54,400). Standard therapies for most solid tumors include surgery, radiation, chemotherapy or some combination of the three modalities.

- Autoimmune and Inflammatory Diseases. Systemic lupus erythematosus ("SLE") inflammatory bowel disease ("IBD"), asthma, allergic rhinitis, rheumatoid arthritis and multiple sclerosis ("MS") are autoimmune and inflammatory diseases that require ongoing therapy and afflict more than 6 million patients in the United States. Autoimmune disease occurs when the patient's immune system goes awry, initiating a cascade of events which results in an attack by the patient's immune system against otherwise healthy tissue and often includes inflammation of the involved tissue. Autoimmune diseases are typically treated with products such as steroids and nonsteroidal, anti-inflammatory agents and with other therapies, all of which are limited for several reasons, including their lack of specificity and ineffectiveness when used chronically. Furthermore, steroids suppress the immune system and make the patient susceptible to infections while nonsteroidal, anti-inflammatory agents have limited efficacy and have been implicated in the formation of gastro-intestinal ulcerations.

- Regulation of Immune System Cells. Monoclonal antibodies may be used to bind to specific subsets of human immune system cells and may act to deplete, to suppress or to up-regulate the activity of the targeted cells. Indeed, the high specificity of monoclonal antibodies enables them to selectively act against different types of B cells or T cells. Depletion of diseased immune cells or suppression of disease-causing immune activities may be possible by using antibodies that attach to specific antigens on the surface of target immune system cells. In particular, the individual B and T cells of the immune system express a broad variety of surface antigens (cell surface markers). Such antigens not only differentiate one cell type from another, but also differentiate individual cells from other cells with specificity for different antigens. Monoclonal antibodies may also be used to bind to molecules, such as cytokines, in the plasma which serve as soluble mediators of immune system cell activity. By neutralizing these molecules, monoclonal antibodies may be used to alter immune cell activity and/or migration, for example, in inflammatory conditions.

THE COMPANY'S PRODUCT AND PRODUCT CANDIDATES

Rituxan, our first product approved for marketing in the United States, and our primary products still under development address immune system disorders, such as lymphomas, solid tumor cancers, and autoimmune and inflammatory diseases, such as SLE and psoriasis. In addition, the Company has discovered certain other product candidates through the application of its technology platform. The products either commercialized or in preclinical and clinical development by the Company and its partners include the following.

IMMUNE SYSTEM CANCER PRODUCTS:	INDICATION	STATUS(1)	DEVELOPMENT/MARKETING(2)
Rituxan	Certain B-cell NHL	U.S.: Approved European Union: Approved(3) Japan: Phase II	Genentech (U.S. co-promotion) Roche (worldwide except U.S. and Japan) Zenyaku (Japan)
IDEC-Y2B8	Certain B-cell NHL (radioimmunotherapy)	Phase III	No current partner
9-AC	Solid tumor/cancers	Phase II	No current partner
AUTOIMMUNE AND INFLAMMATORY PRODUCTS:			
PRIMATIZED IDEC-151	Psoriasis	Pilot	SB (worldwide)
Humanized Anti-gp39	Various autoimmune diseases, initially SLE	Phase II	Eisai (Europe and Asia)
PRIMATIZED Anti-gp39	Various autoimmune diseases	Lead compound selected	Eisai (Europe and Asia)
PRIMATIZED Anti-B7 (IDEC-114)	Various autoimmune diseases, initially psoriasis	Phase I	Mitsubishi (Asia)
PRIMATIZED Anti-CD23 (IDEC-131)	Various allergic conditions, initially allergic asthma	Preclinical development	Seikagaku (Europe and Asia)
Humanized and PRIMATIZED Anti-MIF	Various inflammatory conditions	Discovery	No current partner
OTHER PRODUCTS:			
PROVAX (antigen formulation)	Cancer therapeutic vaccines	Phase I(4)	No current partner

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(1) As used in this Form 10-K, "Discovery" means that the research phase is ongoing and a lead compound has not yet been selected. "Lead compound selected" means agents have been identified that meet preselected criteria in assays for activity and potency. "Preclinical development" means lead compound undergoing testing required prior to submission of IND. "Phase I" means initial human studies designed to establish the safety, dose tolerance and pharmacokinetics of a compound. "Pilot" means a Phase I/II study is currently being designed for this indication, however, prior clinical activities have been conducted in other indications" "Phase I/II" means initial human studies designed to establish the safety, dose tolerance and pharmacokinetics of a compound and which may be designed to show preliminary activity of a compound in patients with the targeted disease. "Phase II" means human studies designed to establish safety, optimal dosage and preliminary activity of a compound. "Phase III" means human studies designed to lead to accumulation of data sufficient to support a marketing license application such as a BLA or an NDA, including data relating to efficacy.

(2) IDEC Pharmaceuticals has retained exclusive marketing rights in the United States for IDEC-Y2B8, anti-gp39, IDEC-131, IDEC-114, 9-AC and all anti-MIF products.

(3) Pricing approval is still pending in certain European countries.

(4) Although Phase I trials have been completed, the Company does not intend to pursue further development unless and until it enters into a partnering arrangement for such development.

IMMUNE SYSTEM CANCER PRODUCTS

IDEC Pharmaceuticals' objective with respect to treating B-cell NHLs is to use its anti-CD20 antibodies to target, bind to and selectively eliminate both the patient's normal and malignant B cells. The following is a brief description of each of the Company's products in this area:

- Rituxan. Rituxan is a genetically engineered, chimeric murine/human monoclonal antibody designed to harness the patient's own immune mechanisms to destroy tumor cells. In November, 1997, Rituxan was approved in the United States for treatment of certain B-cell NHLs and the Company and Genentech now copromote Rituxan in the United States pursuant to a copromotion arrangement. In June 1998 Roche received approval to begin marketing Rituxan (under the trade name MabThera) in the fifteen European Union countries, and Roche has begun marketing MabThera in nine of these countries, with the Company receiving royalties on sales in such countries. To date, Rituxan has received marketing approval in 30 countries worldwide. Pricing approval, however, is still pending in some countries. Other European approvals are still pending.

Laboratory studies performed by the Company have shown that the antibody attaches to the CD20 antigen on B cells and activates a group of proteins known as "complement," leading to normal and malignant B-cell destruction. Additionally, the antibody, when bound to the CD20 antigen, recruits macrophages and natural killer cells to attack the B cells. Through these and other mechanisms, the antibody utilizes the body's immune defenses to lyse (rupture) and deplete B cells. B cells have the capacity to regenerate from early precursor cells that do not express the CD20 antigen. The depletion of normal B cells observed in clinical experience to date has been only temporary, with normal B-cell regeneration typically occurring within six to nine months. The capacity of a tumor to regrow after treatment with Rituxan will depend on the number of malignant B cells, or malignant B-cell precursors (if the malignancy first appeared within a precursor cell), remaining after treatment.

Rituxan was the first monoclonal antibody approved in the United States for a cancer therapy indication. Rituxan is unique in the treatment of B-cell NHLs due to its specificity for the antigen CD20, which is expressed only on normal and malignant B cells, but not on other tissues of the body, and its mechanism of action as compared to conventional lymphoma therapies, including experimental radioimmunotherapies. These properties of Rituxan allow its use in patients where chemotherapy is either poorly tolerated or ineffective in inducing disease remissions. Rituxan is easily administered as outpatient therapy by personnel trained in the use of chemotherapies. A standard course of Rituxan therapy consists of four intravenous infusions given on days 1, 8, 15 and 22, whereas chemotherapy is given typically in repeating cycles for up to four to eight months.

Rituxan is indicated for single agent use in relapsed or refractory, low grade or follicular, CD20 positive, B-cell NHLs, which comprise nearly half of the prevalence of B-cell NHLs in the United States. Ongoing or completed Phase II studies suggest that Rituxan may also be useful in combination with chemotherapy in low grade or follicular B-cell NHLs, and as a single agent, or in combination with various chemotherapies, in the treatment of other forms of B-cell NHLs. In relapsed or chemotherapy refractory B-cell NHLs, which have to date proven to be incurable, Rituxan provides a means to induce remissions of disease in some patients without subjecting the patient to the toxicity and duration of therapy that are typical of chemotherapy regimens. In certain newly diagnosed B-cell NHLs that are curable with early aggressive chemotherapy, the Company believes that the addition of Rituxan to combination regimens may improve the overall cure rate. Demonstration of improved cure rate (i.e. long-term disease remissions) is being sought through ongoing, randomized controlled trials. In Phase III clinical trials, Rituxan, given as a single agent to patients with relapsed or refractory, low grade or follicular, CD20 positive, B-cell NHL, achieved partial or complete responses to therapy in 48% of patients on an intent to treat basis (80 of 166 patients). Of the 80 responding patients (tumor shrinkage greater than 50% verified over at least two independent observations 28 days apart), 10 were complete responses (6%), and 70 were partial responses (42%). The median duration of response (time from first determination of response to tumor regrowth) in the 80 responders was 11.6 months, despite the short duration (22 days) of the full course of therapy. The Company believes that 19 of the 80 responders (approximately 24%) are experiencing ongoing remissions lasting from one-and-a-half to three years.

Retrospective analysis of patient subgroups in the Phase III Rituxan trial showed responses in patients with poor prognostic features, who generally respond poorly to chemotherapy regimes, such as age greater than 60, extranodal disease, prior relapse from autologous bone marrow transplant, or relapse or failure of anthracycline containing regimens.

There are standard response criteria for solid tumor cancers, chronic lymphocytic leukemia, Hodgkin's disease and acute myelogenous leukemia, but currently none for B-cell NHL. As a result, clinical response rates in B-cell NHL may vary depending on which criteria is being applied. For example, one of the requirements for scoring a complete response in the Rituxan pivotal trial was that all measurable lesions must have shrunk to less than 1X1cm. Using this conservative criterion, an 6% complete response rate was reported. However, as presented at the American Society of Hematology meeting in December 1998, complete response rates for the Rituxan pivotal trial increased significantly when analyzed according to alternative minimums for lesion shrinkage, i.e.: 18% CR and 28% CR when analyzed using 1.5X1.5cm and 2.0X2.0cm, respectively. Until uniform criteria is adopted for all B-cell NHL trials, complete response rates will vary widely depending on the measures being utilized.

The following figure shows the percentage change in tumor size in all 166 patients entered into the Phase III trial of Rituxan in relapsed or refractory, low grade or follicular CD20 positive, B-cell NHL.

MAXIMUM PERCENTAGE CHANGE IN TUMOR SIZE AMONG ALL TREATED PATIENTS(1)

LOGO

(1) Tumor shrinkage measured radiographically for the 166 patients by sum of products of lesion perpendicular diameters. Data represents the greatest shrinkage achieved by each patient during the observation period. Subsequent tumor growth may have occurred and data for three patients are unavailable.

(2) Includes two patients with increase in lesion size greater than 100%.

In December 1998, the Company presented information on the results of a Phase II Rituxan re-treatment study at the American Society of Hematology Conference. This Phase II study in patients with low grade or follicular, CD20 positive, B-cell NHL was conducted to determine the safety and efficacy of Rituxan in patients who had relapsed or were refractory to prior chemotherapy, but had responded previously to Rituxan. It appears from the initial analyses of the study that patients who responded to one regimen of Rituxan may be re-treated with additional courses of Rituxan without impairment of bone marrow function (myelosuppression) or development of an immune response (antibodies) to CD20 antibody therapy -- a response called human anti-chimeric antibody (HACA). Of 60 patients treated, 56 were considered evaluable for efficacy. The overall response rate was 41%, with 7 out of 56 (12.5%) being complete responders and 16 out of 56 (28.6%) being partial responders. Median time to progression and duration of response have not been reached after more than 10 months of follow-up. While the overall safety profile seen with re-treatment was similar to what was reported for the initial treatment with Rituxan (primarily infusion-related events that usually occurred within a few hours of the first infusion) other events that occurred less frequently included: leukopenia, nausea, transient bronchospasm, and mild hypotension. These results will be submitted to the FDA in the second quarter of 1999 in support of expanding the information on re-treatment included in the package insert provided to clinicians using Rituxan in the treatment of patients B-cell NHL.

A recent clinical study published in Journal of Clinical Oncology in January 1999, assessed the safety and effectiveness of Rituxan used in combination with cyclophosphamide, doxorubicin, vincristine and prednisone (collectively known as "CHOP") chemotherapy in low-grade or follicular B-cell NHL. The 40 patients entered into the study achieved a 95% response rate after treatment. Of the 40 patients, 22 patients had complete responses (55%), 16 patients had partial responses and two patients were registered but not treated. In this study, medians for duration of response and time to progression had not been reached after a median observation time of 29+ months. Twenty-eight of the 38 assessable patients (74%) continued in remission during this median follow-up period. Attending physicians attributed 75% of toxicity associated with this combined treatment to the CHOP chemotherapy. The most frequently experienced adverse events were neutropenia, alopecia, nauseas and fever. Rituxan was associated with fever and chills.

This CHOP/Rituxan Phase II study and a similar Phase II study conducted by Genentech in intermediate and high grade B-cell NHL served as the basis for the commencement of a large, randomized controlled cooperative Phase III study by the NCI, the Eastern Cooperative Oncology Group, the Cancer and Leukemia Group B, and the Southwest Oncology Group. This study will examine whether the addition of Rituxan to the CHOP regime will improve cure rates (long term remission) in elderly (age greater than 60 years) intermediate and high grade B-cell NHL patients.

The most common adverse events associated with Rituxan, based on the Company's clinical trial experience, are infusion-related, consisting mainly of mild to moderate flu-like symptoms (e.g., fever, chills, rigors) that occur in the majority of patients during the first infusion. Other events which occur with less frequency include nausea, rashes, fatigue and headaches. More serious events include hypotension, wheezing, sensation of tongue or throat swelling and recurrence of cardiac events in patients with a history of angina or arrhythmia. These symptoms were usually limited in duration to the period of infusion and decrease with subsequent infusions. These adverse events are generally more mild and of a shorter duration than the adverse events associated with chemotherapy.

In the fourth quarter of 1998, Genentech, Roche and IDEC Pharmaceuticals notified doctors of the occurrence in certain patients of severe infusion-related adverse events that resulted in eight fatalities out of approximately 14,000 patients treated worldwide since Rituxan was launched.

In an effort to identify expanded applications for Rituxan, the Company, in conjunction with Genentech and Roche, has authorized over 120 Rituxan post-marketing study concepts to date, at least two of which will be large Phase III studies. Several of these trials will explore the use of Rituxan in a variety of investigational B-cell NHL clinical settings including: (i) combination therapy with widely used chemotherapy regimens for both low grade and intermediate/high grade disease; (ii) single agent therapy in newly diagnosed, previously untreated low grade disease; (iii) integration into autologous bone marrow transplant regimens both as an in-vivo purging agent prior to bone marrow harvest and post-transplant as consolidation therapy; and

(iv) treatment of AIDS-related B-cell NHLs. Additionally, clinical trials have been initiated in other B-cell malignancies and pre-malignant conditions such as CLL, multiple myeloma and lymphoproliferative disorders associated with solid organ transplant therapies.

- IDEC-Y2B8. Due to the sensitivity of B-cell tumors to radiation, radiation therapy has historically played, and continues to play, an important role in the management of B-cell lymphomas. Radiation therapy currently consists of external beam radiation focused on certain areas of the body with tumor burden. IDEC Pharmaceuticals is developing an antibody product that is intended to deliver targeted immunotherapy by means of injectable radiation to target sites expressing the CD20 antigen, such as lymphatic B-cell tumors. In clinical testing, the isotope indium-111 may be used to image the patient's tumor and to ensure that normal organs are not exposed to undue radiation from the subsequently administered therapeutic product, which uses the isotope yttrium-90. The low-energy gamma particle emitted by indium is detectable outside the body, thereby allowing the physician to determine the localization of the antibody in the tumor. The companion yttrium-90 isotope provides targeted radiation therapy by emitting a high-energy beta particle that is absorbed by surrounding tissue, leading to tumor destruction. The Company's objective with IDEC-Y2B8 is to provide safer, more effective radiation therapy than is possible with external beam radiation or with other isotopes and to provide this radiation therapy in an outpatient setting.

Other radioisotopes, such as iodine-131, emit both beta and gamma radiation and at certain therapeutic doses require that the patient be hospitalized and isolated in a lead-shielded room for several days. In contrast, the beta particle emitted by yttrium-90 is absorbed by tissue immediately adjacent to the antibody and is concentrated at the antibody target. The Company believes that this short penetrating radiation will permit the use of the product in outpatient therapy, and has conducted its clinical trials in the outpatient setting.

The Company completed a dose-escalating Phase I clinical trial with IDEC-Y2B8 in 15 patients in early 1995. In August 1996, the Company initiated a clinical trial that incorporates both IDEC-Y2B8 and Rituxan, and preliminary results of this trial were reported at the December 1997 meeting of the American Society of Hematology ("ASH"), and updated at the October 1998 annual meeting of the American Society for Therapeutic Radiology and Oncology ("ASTRO"). In this open label, Phase I/II clinical trial, 48 patients with advanced, relapsed B-cell NHL received pretreatment with Rituxan to maximize tumor localization and activity of subsequently administered IDEC-Y2B8. Patients received 250mg/m(2) of Rituxan plus an imaging dose of the product bound to indium-111. During the following week, patient tumors were imaged using the low-energy gamma radiation emitted by the indium isotope. On day eight, patients received a second infusion of Rituxan at 250mg/m(2) followed by a therapeutic dose of IDEC-Y2B8 at 0.2, 0.3 or 0.4 mCi/kg of body weight.

Patients with low grade or follicular B-cell NHL showed an overall response rate (complete and partial responses) of 82% (28/34) across all dose groups, with a response rate of 81% (17/21) for patients with low grade or follicular B-cell NHL who received the standard 0.4mCi/kg dose of IDEC-Y2B8. Of the 28 responders with low grade B-cell NHL, 14 are still in ongoing remission. After a median of 7.2 months of follow-up, the Kaplan-Meier estimate of median time to progression in the 28 responders is 12.4 months. These patients continue to be followed.

Of the patients with low grade or follicular B-cell NHL, 27% (9/34) had complete responses and 56% (19/34) had partial responses. Different criteria are in use today to define complete responses in B-cell NHL. In the IDEC-Y2B8 trial, complete responses required reduction in size of diseased lymph nodes to not more than 1cmX1cm -- the same, rigorous standard used for the approval of Rituxan. Patients with intermediate grade B-cell NHL treated on the Phase I/II trial exhibited an overall response rate of 43% (6/14), with a complete response rate of 29% (4/14) and a partial response rate of 14% (2/14).

Adverse events associated with the treatment regimen were primarily transient and reversible hematologic toxicities (i.e., blood-cell count reductions). The median time to reversal of blood-cell count reductions was 14 days. Investigators reported no major organ dysfunctions. In all patients, normal organs including the red marrow received radiation doses well below the safety limits proscribed in the clinical protocol. Human anti-mouse or anti-chimeric antibody (HAMA/HACA) reactions were observed in only 2% (1/51) of patients and were not a therapy-limiting factor.

The Company has initiated two pivotal trials with IDEC-Y2B8. The first trial will enroll and treat approximately 150 relapsed or refractory, low grade or follicular B-cell NHL patients who have not previously been treated with Rituxan. This is a two-arm, randomized, controlled trial using the standard regimen of Rituxan alone versus Rituxan followed by IDEC-Y2B8. The primary endpoint of this trial is overall response rate, with the objective of showing a statistically significant advantage in efficacy for IDEC-Y2B8 over Rituxan alone. Patient accrual is anticipated to be completed by the end of third quarter of 1999. The second trial is in relapsed or refractory, low grade or follicular B-cell NHL patients who have already been treated with Rituxan but did not achieve a significant response to Rituxan in terms of overall tumor shrinkage or duration of remission. Again, overall response rate is the primary endpoint. 60 patients will be entered in this trial and accrual is anticipated to be completed by the middle of 1999.

The Company expects that Rituxan and IDEC-Y2B8 will provide complementary products for the management of B-cell NHLs. Because most B-cell NHLs are treated today in community-based group practices, Rituxan fits nicely into the community practice, as no special equipment or extensive training is required for its administration or for management of treatment related side effects. Rituxan has shown activity even in patients refractory to chemotherapy and is indicated for this use, so that it may provide a viable option for the community-based oncologist prior to referral of the patient to the major medical center for treatment with more aggressive therapies, potentially including IDEC-Y2B8. By contrast, all radioimmunotherapies will be administered by the nuclear medicine specialists or radiation oncologists at the major medical or cancer centers that are equipped for the handling, administration and disposal of radioisotopes. Also, the nuclear medicine department, but not the community-based practice, has the specialized equipment and governmental licenses that are required for use of radioisotopes. Thus the Company believes that referral patterns will develop for treatment of B-cell NHL patients with radioimmunotherapies at major medical centers after the community-based oncologist has exhausted all other options, such as Rituxan or chemotherapy, for the management of his or her patients. This trend will be further reinforced by the observation made by the Company, and by others working in the field, of the substantial clinical activity of radioimmunotherapies in patients with late-stage disease that has become refractory to chemotherapies. Thus, IDEC Pharmaceuticals is committed to the development and commercialization of IDEC-Y2B8 as a complementary product to Rituxan that might be used throughout the course of a patient's disease providing an alternative, for both the patient and the healthcare professional, to conventional chemotherapies.

- 9-Aminocamptothecin. In July 1997, IDEC Pharmaceuticals completed its acquisition of worldwide rights to 9-AC from Pharmacia & Upjohn S.p.A. ("Pharmacia & Upjohn"). This drug was acquired as part of a consent decree issued by the Federal Trade Commission ("FTC") regarding the merger of Pharmacia AB with The Upjohn Company. IDEC Pharmaceuticals now holds exclusive rights to all licenses and technology related to 9-AC and is proceeding with clinical development of the compound. In preclinical and Phase I/II clinical studies conducted by Pharmacia & Upjohn and the National Cancer Institute ("NCI"), 9-AC has shown broad-spectrum activity against a variety of solid tumors. A semi-synthetic analogue of the plant-derived molecule camptothecin, 9-AC belongs to a class of drugs known as camptothecins that interferes with DNA replication by inhibiting a critical nuclear enzyme, topoisomerase I. In October 1997, the Company announced that it had begun treating patients as part of a Phase I/II clinical trial of 9-AC. The trial is aimed at verifying the maximum tolerated dose of 9-AC, determined by other investigators in earlier trials, and at seeking an initial indication to pursue for marketing approval. The investigational study population includes patients with any one of eight solid tumor types: non-small cell lung, colorectal, pancreatic, gastric, bladder, prostate, head and neck, or kidney. The Company intends to involve additional centers in the Phase II portion of the trial. If the investigators see at least one response in any tumor type, additional patients with that cancer will be studied in Phase IIB of the trial to determine an estimate of the response rate for that disease. If the investigators identify a meaningful response rate for one or more tumor types, the Company will attempt to secure a partner with whom to take an indication into a registration or pivotal study.

AUTOIMMUNE AND INFLAMMATORY PRODUCTS

IDEC Pharmaceuticals is developing a proprietary new class of antibodies, termed PRIMATIZED(R) antibodies, that are of part human, part macaque monkey, origin. These antibodies are structurally similar to,

and potentially indistinguishable by a patient's immune system from, human antibodies. PRIMATIZED antibodies may provide therapeutic intervention for diseases or conditions not amenable to chronic treatment with mouse-derived antibodies. The Company's objective with its PRIMATIZED antibodies is to provide therapies that can be used to control autoimmune diseases characterized by overactive immune functions. The Company has entered into research and development collaborations with SB, Mitsubishi Chemical Corporation ("Mitsubishi"), Seikagaku Corporation ("Seikagaku") and Eisai, all of which utilize the Company's PRIMATIZED technology and which target distinct, cell surface antigens. See "-- Strategic Alliances."

- PRIMATIZED IDEC-151. In March 1998, the Company and SB announced that they had selected IDEC-151 (designated SB-217969 by SB for its clinical development) as their lead PRIMATIZED anti-CD4 antibody for the treatment of rheumatoid arthritis ("RA"). In a Phase I portion of a Phase I/II study of 32 patients with moderate to severe RA, the results of which were announced in late November 1997, IDEC-151 displayed no CD4 depletion and no infusion-related adverse events. Based upon the clinical profile of IDEC-151 shown in the Phase II portion of this study, as well as the current competitive landscape for new products in RA, SB has decided to discontinue the development of IDEC-151 for RA at this time and instead to continue development of IDEC-151 in another autoimmune disease, psoriasis. Trials in this indication will be conducted by SB and are in the planning stages.

- Humanized Anti-gp39 (IDEC-131) and PRIMATIZED Anti-gp39. In December 1995, the Company entered into a research and development collaborative agreement with Eisai. The collaboration focuses on developing humanized and PRIMATIZED antibodies against the gp39 antigen. This antigen, also referred to as the CD40 ligand, is an essential immune system trigger for B-cell activation and antibody production. Potential target indications include transplantation and antibody-mediated autoimmune diseases such as idiopathic thrombocytopenic purpura ("ITP") and SLE. The development of the Company's humanized anti-gp39 monoclonal antibody ("IDEC-131") is based on technology that the Company licensed from Dartmouth College, where researchers have shown that the binding of gp39 to its CD40 receptor on B cells is essential for proper immune system function. These researchers generated anti-gp39 antibodies that blocked this T-cell and B-cell interaction and halted disease progression in a variety of animal models of disease characterized by abnormal or unwanted immune response. Moreover, when researchers ended the animals' anti-gp39 treatments, the animals' antibody-producing capacity returned to normal levels, but their disease remained suppressed. Treatment with the anti-gp39 antibodies appeared to have reset the animals' immune systems and restored a normal immune response. Under the collaborative agreement, the Company and Eisai have agreed to develop a humanized anti-gp39 antibody and launch additional efforts to develop a second generation, PRIMATIZED anti-gp39 antibody. This effort has resulted in the identification of the humanized anti-gp39 antibody lead candidate, IDEC-131, which underwent preclinical testing, process development and manufacturing of clinical trial material in early 1997. The Company filed an IND for IDEC-131 in November 1997 and began a Phase I clinical study in SLE in February 1998.

- PRIMATIZED Anti-B7. In November 1993, the Company entered into a research and development collaboration with Mitsubishi that focuses on the development of PRIMATIZED antibodies directed at a B7 antigen. This B7 antigen appears on the surface of antigen-presenting cells and is involved in the interaction of these cells with T cells in triggering a cascade of immune system responses. Antibodies directed at the B7 antigens may block this cascade and, therefore, may be useful in preventing unwanted immune responses in certain inflammatory and chronic autoimmune conditions such as psoriasis, arthritis and MS. Mitsubishi has actively shared in the development process, generating animal models and participating in research with the Company. On October 26, 1998, IDEC Pharmaceuticals announced that it had begun a Phase I clinical trial with PRIMATIZED anti-B7.1, IDEC-114. The study will evaluate the safety, tolerability and pharmacokinetics of a single dose of the investigational agent in approximately 24 patients with psoriasis.

- PRIMATIZED Anti-CD23. In December 1994, the Company entered into a collaboration with Seikagaku aimed at the development of PRIMATIZED anti-CD23 antibodies for the potential treatment of allergic rhinitis, asthma and other allergic conditions. Antibodies against the CD23 receptor

on certain white blood cells inhibit the production of immune system molecules called immunoglobulin class E, or IgE, which are known to trigger allergic conditions. At the same time, anti-CD23 antibodies do not affect the production of the immunoglobulins (the patient's own antibodies) responsible for granting protective immunity to infectious agents. Thus, PRIMATIZED anti-CD23 antibodies may provide a unique new approach to treating chronic illnesses such as allergic rhinitis and asthma. This effort has resulted in the identification of a PRIMATIZED antibody lead candidate which is expected to continue preclinical testing, process development and manufacturing of clinical material during 1999, with an expected IND filing in late 1999.

- Humanized and PRIMATIZED Anti-MIF. Macrophage migration inhibitory factor ("MIF") is the body's natural counter-regulatory cytokine which serves to override the anti-inflammatory activities of natural and administered steroids. Inhibition of MIF may represent a novel approach to the management of a variety of acute and chronic inflammatory diseases, including steroid-resistant rheumatoid arthritis and asthma. In September 1997, IDEC Pharmaceuticals licensed from Cytokine Networks, Inc. ("CNI"), a privately-held bio-pharmaceutical company, development rights to CNI's anti-MIF antibody technology. Under the terms of the licensing and development agreement, the Company became the exclusive licensee of CNI's rights to the anti-MIF antibody technology for therapeutic and diagnostic applications. In return for these rights, the Company made a $3.0 million preferred equity investment in CNI, which will also receive milestone payments (up to a maximum of $10.5 million) and royalties on the sales by the Company of approved products resulting from the collaboration.

TECHNOLOGY

The Company is developing products for the management of immune system cancers, solid tumors and autoimmune and inflammatory diseases. Our antibody products bind to specific subsets of human immune system cells, or to soluble mediators of immune cell activity, and act to deplete or to alter the activity of these cells. The products are administered intravenously and target cells or soluble mediators located in easily accessible compartments of the body, specifically the blood, the lymphatic fluid and the synovial fluid. For treatment of B-cell NHLs, our products target a cell surface marker known as CD20 which is present only on B cells but not on B-cell precursors. These products act to reduce total B-cell levels, including both malignant and normal B cells. The depletion of normal B cells observed in clinical experience to date has been only temporary, with regeneration occurring within months from the unaffected B-cell precursors. The Company believes that its lead product, Rituxan, and, if successfully developed, our radioimmunotherapeutic agent, IDEC-Y2B8, may provide therapeutic alternatives to complement the treatment of certain B-cell NHLs.

Due to their specificity and affinity for cell surface receptors, monoclonal antibodies are an attractive means by which to treat autoimmune diseases. Attachment of monoclonal antibodies to specific cell surface receptors can be used to suppress aberrant and unwanted immune activity. Historically, however, the use of monoclonal antibodies as an ongoing therapy has been limited by the body's rejection of the mouse-derived ("murine") components of the antibodies. Murine monoclonal antibodies, which are structurally different from human antibodies, tend to trigger adverse immune reactions when used as therapies. These reactions include a HAMA response in which the patient's immune system produces antibodies against the therapeutic antibody, thus limiting its effectiveness.

The Company has developed the following proprietary technology for use with and in the development of its products:

- PRIMATIZED Antibody Technology. The Company has developed a proprietary PRIMATIZED antibody technology designed to avoid HAMA responses and other immunogenicity problems by developing monoclonal antibodies from primate rather than mouse B cells. These antibodies are characterized by their strong similarity to human antibodies and by the absence of mouse components. In 1998, the Company received an issued U.S. patent covering its PRIMATIZED antibodies. Underlying this proprietary technology is our discovery that macaque monkeys produce antibodies that are structurally indistinguishable from human antibodies in their variable (antigen-binding) regions. Further, the Company found that the macaque monkey can be immunized to make antibodies that react with

human, but not with macaque, antigens. Genetic engineering techniques are then used to isolate the portions of the macaque antibody gene that encode the variable region from a macaque B cell. This genetic material is combined with constant region genetic material from a human B cell and inserted into a host cell line which then expresses the desired antibody specific to the given antigen. The result is a part human, part macaque PRIMATIZED antibody which appears structurally to be so similar to human antibodies that it may be accepted by the patient's immune system as "self." This development allows the possibility of therapeutic intervention in chronic diseases or other conditions that are not amenable to treatment with antibodies containing mouse components. The Company is currently using its PRIMATIZED technology for the development of its IDEC-151, IDEC-114 and anti-CD23 product candidates.

- PROVAX(TM) Antigen Formulation. The Company has also discovered a proprietary antigen formulation, PROVAX, which has shown the ability to induce cellular immunity, manifested by cytotoxic T lymphocytes, in animals immunized with protein antigens. Cellular immunity is a counterpart to antibody-based immunity and is responsible for the direct destruction of virally infected and malignant cells. PROVAX is a combination of defined chemical entities and may provide a practical means for the development of effective immunotherapies that act through the induction of both antibody and cell-mediated immunity. The Company believes such immunotherapies may be useful for the treatment of certain cancers and viral diseases. Preliminary studies also indicate that PROVAX can be safely administered by injection to human subjects. We intend to make PROVAX available through licenses and collaborations to interested partners for development of immunotherapeutic vaccines.

- Proprietary Vector Technologies. The Company has developed methods of engineering mammalian cell cultures using proprietary gene expression technologies ("vector technologies") that rapidly and reproducibly select for stable cells, producing high levels of desired proteins. These technologies allow the efficient production of proteins at yields that may be significantly higher, and costs that may be significantly lower, than current, competing cell culture manufacturing methods. The Company has successfully applied one of these technologies to the commercial scale production of Rituxan.

STRATEGIC ALLIANCES

The Company has entered into one or more strategic partnering arrangements for many of its product development programs. Through these strategic partners, the Company is funding a significant portion of its product development costs and is capitalizing on the production, development, regulatory, marketing and sales capabilities of its partners. Unless otherwise indicated, the amounts shown below as potential payments include license fees, research and development fees and milestone payments. In addition, the Company's strategic partners would pay royalties on product sales, or in the case of Genentech or SB, would in addition share copromotion profits in the United States once products are commercialized. The Company's entitlement to such payments depends on achieving milestones related to development, clinical trials results and regulatory approvals and other factors. These arrangements include:

- Genentech, Inc. In March 1995, the Company and Genentech entered into a collaborative agreement for the clinical development and commercialization of the Company's anti-CD20 monoclonal antibody, Rituxan, for the treatment of B-cell NHLs. Concurrent with the collaborative agreement, the Company and Genentech also entered into an expression technology license agreement for a proprietary gene expression technology developed by the Company and a preferred stock purchase agreement providing for certain equity investments that have been made in the Company by Genentech. In November 1995, the Company, Zenyaku Kogyo Co. Ltd. ("Zenyaku") and Genentech entered into a joint development, supply and license agreement pursuant to which Zenyaku received exclusive rights to develop, market and sell Rituxan in Japan and the Company will receive royalties on sales of Rituxan in Japan. In addition, the Company and Genentech are copromoting Rituxan in the United States. Genentech retained commercialization rights throughout the rest of the world, except in Japan. Genentech has granted Roche exclusive marketing rights outside of the United States, and Roche has elected to market Rituximab under the trade name MabThera. The Company and Roche are currently discussing an arrangement for commercialization of Rituxan in Canada. The Company will receive royalties on sales outside the United States. The collaborative agreement between the Company and

Genentech provides two independent mechanisms by which either party may purchase or sell its rights in the copromotion territory from or to the other party. Upon the occurrence of certain events that constitute a change of control of the Company, Genentech may elect to present an offer to the Company to purchase the Company's copromotion rights. The Company must then accept Genentech's offer or purchase Genentech's copromotion rights for an amount scaled (using the profit sharing ratio between the parties) to Genentech's offer. Under a second mechanism, after a specified period of commercial sales and (i) upon a certain number of years of declining copromotion profits or (ii) if Genentech files for U.S. regulatory approval on a competitive product during a limited period of time, either party may offer to purchase the other party's copromotion rights. The offeree may either accept the offer price or purchase the offeror's copromotion rights at the offer price scaled to the offeror's share of copromotion profits.

- SmithKline Beecham, p.1.c. In October 1992, the Company and SB entered into an exclusive worldwide collaborative research and license agreement limited to the development and commercialization of therapeutic products based on the Company's PRIMATIZED anti-CD4 antibodies. Under the terms of this agreement, the Company may receive payments in excess of $60.0 million, subject to the attainment of certain milestones, of which $32.6 million has been recognized through December 31, 1998. The Company will receive funding for anti-CD4 related research and development programs, as well as royalties and a share of copromotion profits in the United States and Canada on sales of products which may be commercialized as a result of the collaboration. At any time, SB may terminate this agreement by giving the Company 30 days' written notice based on a reasonable determination that the products do not justify continued development or marketing.

- Mitsubishi Chemical Corporation. In November 1993, the Company entered into a three-year collaborative agreement and an ongoing license agreement with Mitsubishi for the development of a PRIMATIZED anti-B7 antibody. Under the terms of the agreement, the Company may receive payments totaling $12.2 million to fund research of the PRIMATIZED anti-B7 antibody, subject to the attainment of certain milestones, of which $9.2 million has been recognized through December 31, 1998. Under the license agreement, the Company has granted Mitsubishi an exclusive license in Asia to make, use and sell PRIMATIZED anti-B7 antibody products. The Company will receive royalties on sales by Mitsubishi of the developed products.

- Seikagaku Corporation. In December 1994, the Company and Seikagaku entered into a collaborative development agreement and a license agreement aimed at the development and commercialization of therapeutic products based on the Company's PRIMATIZED anti-CD23 antibodies. Under the terms of these agreements, Seikagaku may provide up to $26.0 million in milestone payments and support for research and development, subject to the attainment of certain milestones, of which $18.9 million has been recognized through December 31, 1998. Under the license agreement, Seikagaku has received exclusive rights in Europe and Asia to all products emerging from the collaboration. The Company will receive royalties on eventual product sales by Seikagaku. At any time, Seikagaku may terminate the license agreement by giving the Company 60 days' written notice based on a reasonable determination that the products do not justify continued development or marketing.

- Eisai Co., Ltd. In December 1995, the Company and Eisai entered into a collaborative development agreement and a license agreement aimed at the development and commercialization of humanized and PRIMATIZED anti-gp39 antibodies. Under the terms of these agreements, Eisai may provide up to $37.5 million in milestone payments and support for research and development, subject to the attainment of certain milestones and satisfaction of other criteria to be agreed upon between the parties, of which $29.1 million has been recognized through December 31, 1998. Eisai will receive exclusive rights in Asia and Europe to develop and market resulting products emerging from the collaboration, with the Company receiving royalties on eventual product sales by Eisai. At any time, Eisai may terminate the development agreement by giving the Company 60 days' written notice based on a reasonable determination that the products do not justify continued development or marketing.

- Chugai Pharmaceutical Co., Ltd. In March 1996, the Company and Chugai Pharmaceutical Co., Ltd. ("Chugai") entered into a worldwide license agreement (co-exclusive with IDEC Pharmaceuticals, Genentech, Kirin Brewery Co., Ltd., Pharmaceutical Division ("Kirin") and Boehringer Ingleheim GmbH ("BI")) for the Company's proprietary vector technology for high expression of recombinant proteins in mammalian cells. As part of the agreement, Chugai paid an up-front licensing fee of $4.5 million to the Company and will pay royalties on sales of Chugai products manufactured using the technology.

- Boehringer Ingleheim GmbH. In December 1996, the Company and BI entered into a worldwide license agreement (co-exclusive with IDEC Pharmaceuticals, Genentech, Chugai and Kirin) for the Company's proprietary vector technology for high expression of recombinant proteins in mammalian cells. As part of the agreement, BI paid an up-front licensing fee of $5.1 million to the Company and will pay royalties on sales of BI products manufactured using the technology.

- Kirin Brewery Co., Ltd. Pharmaceutical Division. In December 1997, the Company and Kirin entered into a worldwide license agreement (co-exclusive with IDEC Pharmaceuticals, Genentech, Chugai and BI) for the Company's proprietary vector technology for high expression of recombinant proteins in mammalian cells. As part of the agreement, Kirin paid an up-front licensing fee of $6.3 million to the Company, which was recognized in the first quarter of 1998, and will pay royalties to the Company on sales of Kirin products manufactured using the technology.

MANUFACTURING STRATEGY

From its inception, the Company has focused on establishing and maintaining a leadership position in cell culture techniques for antibody manufacturing. Cell culture provides a method for manufacturing of clinical and commercial grade protein products by reproducible techniques at various scales, up to many kilograms of antibody. The Company's manufacturing facility is based on the suspension culture of mammalian cells in stainless steel vessels. Suspension culture fermentation provides greater flexibility and more rapid production of the large amounts of antibodies required for pivotal trials than the bench-scale systems that were previously utilized by the Company. The Company's manufacturing facility has been approved by the FDA only for the commercial manufacture of Rituxan and currently may not be used for the commercial manufacture of other products. See "-- Government Regulation."

The Company is in the process of completing a modification to its copromotion arrangement with Genentech that will allow the Company to terminate early its obligations to supply to Genentech bulk Rituxan manufactured at the Company's manufacturing facility. Rather than supplying bulk Rituxan to Genentech through November, 1999, the Company now anticipates transferring all manufacturing to Genentech at the end of the third quarter of 1999. Genentech has the current capacity to handle current projected Rituxan requirements. The Company anticipates using its available capacity for production of commercial and clinical supplies of its other developmental candidates and third party contract manufacturing. As such, IDEC Pharmaceuticals will now supply its own commercial requirements of the antibody for IDEC-Y2B8 upon the receipt of approval, if any, from the FDA to manufacture and market the antibody. The Company does not have expertise or facilities for small molecule chemical manufacturing. If the Company's product candidate, 9-AC, proceeds in development, the Company, will need to establish a long term manufacturing arrangement for 9-AC with an appropriate contract manufacturer. The Company's 9-AC clinical materials requirements will be met over the next year by Pharmacia & Upjohn, as part of the product in-license agreement. Additionally, as the Company does not have fill/finish expertise, the Company will be dependent on outside contractors to meet its current and future requirements for fill/finish. See "Risk Factors -- We Rely Heavily on Contract Manufacturers" and "-- Government Regulation."

The Company is dependent upon Genentech to fill/finish and meet long-term manufacturing demands for Rituxan and SB to fulfill all of the manufacturing requirements for IDEC-151. The Company is considering the addition of another manufacturing facility to meet its long-term requirements for additional products under development.

The Company has made its vector technology platform available for licensing to a small number of other biopharmaceutical and pharmaceutical companies. This technology has been licensed to Genentech, Chugai, BI and Kirin.

SALES AND MARKETING STRATEGY

During 1999, the Company will depend on the successful marketing and sales of Rituxan for much of its anticipated revenue. Rituxan will be marketed and sold in the United States pursuant to a copromotion agreement with Genentech, which currently has a sales and marketing staff of approximately 87 professionals that is also promoting one other new biologic application in oncology. To fulfill its duties under the copromotion agreement, the Company has recently created a marketing staff and a sales organization of 35 professionals with experience primarily in the oncology therapeutic category, who are currently dedicated exclusively to the commercialization of Rituxan. The Company relies heavily on Genentech to supply related marketing support services including customer service, order entry, shipping and billing, customer reimbursement assistance, managed-care sales support, medical information, and sales training.

Outside of the United States and Canada, the Company has adopted a strategy to pursue collaborative arrangements with established pharmaceutical companies for marketing, distribution and sale of its products. See "Risk Factors -- We Have Limited Sales and Marketing Experience" and "Risk Factors -- We May be Unable to Adequately Protect or Enforce Our Intellectual Property Rights or Secure Rights to Third Party Patents."

PATENTS AND PROPRIETARY TECHNOLOGY

The biopharmaceutical field is characterized by a large number of patent filings. A substantial number of patents have already been issued to other biotechnology and biopharmaceutical companies. Particularly in the monoclonal antibody and recombinant deoxyribonucleic acid ("DNA") fields, competitors may have filed applications for or have been issued patents and may obtain additional patents and proprietary rights relating to products or processes competitive with or similar to those of the Company. Moreover, United States and foreign country patent laws are distinct and the interpretations thereunder unique to each country. Thus, patentability, validity and infringement issues for the same technology or inventions may be resolved differently in different jurisdictions. There can be no assurance that patents do not exist in the United States or in foreign countries or that patents will not be issued that would have an adverse effect on the Company's ability to market its products. Accordingly, the Company expects that commercializing its products may require licensing and/or cross-licensing of patents with other companies or institutions in the field. There can be no assurance that the licenses, which might be required for the Company's processes or products, would be available on commercially acceptable terms, if at all. The ability to license any such patents and the likelihood of successfully contesting the scope, validity or enforceability of such patents are uncertain and the costs associated therewith may be significant. If the Company is required to acquire rights to valid and enforceable patents but cannot do so at a reasonable cost, the Company's ability to manufacture or market its products would be materially adversely affected.

IDEC Pharmaceuticals is the assignee of 20 issued patents, five allowed and 22 pending U.S. patent applications and numerous corresponding foreign patent applications. Certain other patents and/or applications owned by third parties have been exclusively licensed, as in the case of anti-gp39 core technology licensed from Dartmouth College, or non-exclusively licensed by IDEC Pharmaceuticals. The Company has filed trademark applications in the United States, Canada and in certain international markets for the trademarks "PRIMATIZED," "PROVAX," "Rituxan" and "IDEC Pharmaceuticals." "IDEC Pharmaceuticals," "Rituxan" and "PRIMATIZED" have been registered as trademarks in the United States.

The Company has three issued and three pending U.S. patent applications and pending foreign counterparts broadly directed to its anti-CD20 antibody technology, including Rituxan, and the radioimmunoconjugate, IDEC-Y2B8. The Company's radioimmunoconjugate products include a chelating agent covered by a U.S. patent that is non-exclusively sublicensed to the Company. The Company has been granted by the European Patent Office a patent covering Rituxan. Genentech, IDEC Pharmaceuticals' collaborative partner

for Rituxan, has secured an exclusive license to a U.S. patent and counterpart foreign patent applications assigned to Xoma Corporation ("Xoma"), that relate to chimeric antibodies against the CD20 antigen. Genentech has granted IDEC Pharmaceuticals a non-exclusive sublicense to make, have made, use and sell certain products, including Rituxan, under such patents and patent applications. Genentech and the Company will share any royalties due to Xoma in the Genentech/IDEC Pharmaceuticals copromotion territory.

The Company has filed for worldwide patent protection on its PRIMATIZED antibody technology. The Company has received five additional U.S. patents claiming the PRIMATIZED antibody technology that were issued in 1997 and 1998. These patents generically and specifically cover the Company's PRIMATIZED antibody technology.

PROVAX, the Company's antigen formulation, is the subject matter of five issued U.S. patents, and two pending U.S. application and pending foreign counterparts. In addition, U.S. and foreign patent applications have been filed on aspects of the Company's proprietary high-yield gene expression technology, including the Company's homologous recombination system. The Company has been granted two U.S. patents and has received one notices of allowance on U.S. patent applications claiming the high-yield gene expression technology. In November 1998, the Company received a U.S. patent directed to its homologous recombination technology.

In 1997 and 1998, the Company's licensor, Dartmouth University, received three patents with claims that relate the Company's anti-gp39 antibody (IDEC-131) technology. Other applications relevant to the Company's anti-gp39 antibody program, which are either licensed from Dartmouth University or assigned to the Company, are pending in the USPTO and foreign patent offices.

The Company is aware of several third party patents and patent applications (to the extent they issue as patents) that, if successfully asserted against the Company, may materially affect the Company's ability to make, use, offer to sell, sell and import its products. These third party patents and, patent applications may include, without limitation:

- U.S. patent applications and foreign counterparts filed by Bristol-Myers Company that disclose antibodies to a B7 antigen;

- a U.S. patent assigned to Columbia University, which the Company believes has been exclusively licensed to Biogen, related to monoclonal antibodies to the 5C8 antigen found on T cells. The Company believes the 5C8 antigen and gp39, the target for the Company's anti-gp39 antibodies and its collaboration with Eisai, are the same protein expressed on the surface of T cells;

- a number of issued U.S. and foreign patents that relate to various aspects of radioimmunotherapy of cancer and to methods of treating patients with anti-CD4 antibodies; and

- three U.S. patents, assigned to Burroughs Wellcome, relating to therapeutic uses of CHO glycosylated antibodies.

The owners, or licensees of the owners, of these patents and patent applications (to the extent they issue as patents) may assert that one or more of the Company's products infringe one or more claims of such patents. Such owners or licensees of foreign counterparts to these patents and any other foreign patents may assert that one or more of the Company's products infringe one or more claims of such patents. Specifically, if legal action is commenced against the Company to enforce any of these patents and patent applications (to the extent they issue as patents) and the plaintiff in such action prevails, the Company could be prevented from practicing the subject matter claimed in such patents or patent applications. In such event or under other appropriate circumstances, the Company may attempt to obtain licenses to such patents or patent applications. However, no assurance can be given that any owner would license the patents to the Company, at all or on terms that would permit commercialization of the Company's products using such technology. An inability to commercialize such products would have a material adverse effect on the Company's business, results of operations and financial condition.

If the Company is required to enforce any of its patents, such enforcement may require the use of substantial financial and human resources of the Company. The Company may also have to participate in

interference proceedings, including in connection with such U.S. patent assigned to Columbia University described above, if declared by the U.S. Patent and Trademark Office ("PTO") to determine priority of invention, which typically take years to resolve and could also result in substantial costs to the Company. Moreover, should the Company need to defend against a patent lawsuit or to circumvent existing patents, substantial delays and expense in product redesign and development or significant legal expense and uncertainty in asserting non-infringement, invalidity and/or unenforceability of any patent may also result. The Company also relies upon unpatented trade secrets, and no assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's trade secrets or disclose such technology, or that the Company can meaningfully protect such rights.

IDEC Pharmaceuticals requires its employees, consultants, outside scientific collaborators and sponsored researchers and other advisers to execute confidentiality agreements upon the commencement of employment or consulting relationships with the Company. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with IDEC Pharmaceuticals is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees of the Company, the agreement provides that all inventions conceived by such employees shall be the exclusive property of the Company. There can be no assurance, however, that these agreements will provide meaningful protection or adequate remedies for the Company's trade secrets in the event of unauthorized use or disclosure of such information.

RAW MATERIALS

Some materials used in the Company's products and potential products, including Rituxan and IDEC-Y2B8, are currently available only from sole or a limited number of suppliers. In addition, the suppliers of some materials for the Company's products must be approved by the FDA and/or by other governmental agencies. Although the Company has initiated a program for identifying alternative suppliers for certain materials, any interruption or delay in its supply of materials or delays in the applicable governmental approval of new suppliers or any loss of a sole source supplier could have a material adverse effect on the Company's business, financial condition and results of operations.

COMPETITION

The biotechnology industry is intensely competitive. The Company competes with biotechnology and pharmaceutical companies that have been established longer than the Company, have a greater number of products on the market, have greater financial and other resources and have other technological or competitive advantages. The Company also competes in the development of technologies and processes and in acquiring personnel and technology from academic institutions, government agencies, and other private and public research organizations. Consequently, the Company cannot be certain that it will be able to produce or acquire rights to new products with commercial potential. In addition, the Company cannot be certain that one or more of its competitors will not receive patent protection that dominates, blocks or adversely affects the Company's product development or business; will benefit from significantly greater sales and marketing capabilities; or will not develop products that are accepted more widely than the Company's. The Company is aware that a competitor is in late stage clinical trials with a radiolabeled murine antibody for the treatment of low-grade NHL.

REGULATION OF PRODUCTS BY THE FDA

The testing, manufacturing, labeling, advertising, promotion, export and marketing, among other things, of the Company's product and proposed products are subject to extensive regulation by governmental authorities in the United States and other countries. In the United States, pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act and other laws, including, in the case of biologics, the Public Health Service Act. At the present time, with the exception of 9-AC, the Company believes that its products will be regulated by the FDA as biologics. Biologics require the submission of a BLA and approval by the FDA prior to being marketed in the United States. 9-AC, which the Company believes

will be regulated by the FDA as a drug, will require the submission of an NDA and approval by the FDA prior to being marketed in the United States. The regulatory approval process for an NDA is similar to the approval process for a BLA. Manufacturers of biologics and drugs may also be subject to state regulation.

The steps required before a product may be approved for marketing in the United States generally include (i) preclinical laboratory tests and animal tests, (ii) the submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may commence, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product, (iv) the submission to the FDA of a BLA or NDA, (v) FDA review of the BLA or NDA, and (vi) satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is made to assess compliance with cGMP. The testing and approval process requires substantial time, effort, and financial resources and there can be no assurance that any approval will be granted on a timely basis, if at all.

Preclinical tests include laboratory evaluation of the product, as well as animal studies to assess the potential safety and efficacy of the product. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may be commenced. The IND will automatically become effective 30 days after receipt by the FDA, unless the FDA before that time raises concerns or questions about the conduct of the trials as outlined in the IND. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. There can be no assurance that submission of an IND will result in FDA authorization to commence clinical trials.

Clinical trials involve the administration of the investigational product to healthy volunteers or patients under the supervision of qualified principal investigators. Further, each clinical study must be reviewed and approved by an independent Institutional Review Board.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap. In Phase I, the initial introduction of the drug into human subjects, the drug is usually tested for safety (adverse effects), dosage tolerance, absorption, metabolism, distribution, excretion and pharmacodynamics. Phase II usually involves studies in a limited patient population to (i) evaluate preliminarily the efficacy of the drug for specific, targeted indications, (ii) determine dosage tolerance and optimal dosage and (iii) identify possible adverse effects and safety risks. Phase III trials generally further evaluate clinical efficacy and test further for safety within an expanded patient population.

In the case of products for severe or life-threatening diseases, the initial human testing is sometimes done in patients rather than in healthy volunteers. Since these patients are already afflicted with the target disease, it is possible that such studies may provide preliminary evidence of efficacy traditionally obtained in Phase II trials. These trials are frequently referred to as "Phase I/II" trials. There can be no assurance that Phase I, Phase II or Phase III testing will be completed successfully within any specific time period, if at all, with respect to any of the Company's product candidates. Furthermore, the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The results of the preclinical studies and clinical studies, together with other detailed information, including information on the manufacture and composition of the product, are submitted to the FDA in the form of a BLA or NDA requesting approval to market the product. Before approving a BLA or NDA, the FDA will inspect the facilities at which the product is manufactured, and will not approve the product unless cGMP compliance is satisfactory. The FDA may deny a BLA or NDA if applicable regulatory criteria are not satisfied, require additional testing or information, and/or require postmarketing testing and surveillance to monitor the safety or efficacy of a product. There can be no assurance that FDA approval of any BLA or NDA submitted by the Company will be granted on a timely basis or at all. Also, if regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which it may be marketed.

Both before and after approval is obtained, violations of regulatory requirements, including the preclinical and clinical testing process, the BLA or NDA review process, or thereafter (including after approval) may result in various adverse consequences, including the FDA's delay in approving or refusal to approve a product,

withdrawal of an approved product from the market, and/or the imposition of criminal penalties against the manufacturer and/or BLA or NDA holder. For example, BLA and NDA holders are required to report certain adverse reactions to the FDA, and to comply with certain requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to cGMP regulations after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to expend time, monies and effort in the area of production and quality control to maintain cGMP compliance. In addition, discovery of problems may result in restrictions on a product, manufacturer or BLA or NDA holder, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of the Company's products under development.

The Company will also be subject to a variety of foreign regulations governing clinical trials and sales of its products. Whether or not FDA approval has been obtained, approval of a product by the comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. At least initially, the Company intends, to the extent possible, to rely on foreign licensees to obtain regulatory approval for marketing its products in foreign countries.

Orphan Drug Designation. Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a "rare disease or condition," which generally is a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting a BLA or NDA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are publicly disclosed by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. If a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, i.e., the FDA may not approve any other applications to market the same drug for the same indication, except in certain very limited circumstances, for a period of seven years.

In 1994, the Company obtained orphan drug designation for Rituxan, IDEC-Y2B8 and IDEC-In2B8 from the FDA to treat certain B-cell NHLs. In connection with its approval by the FDA, Rituxan has received orphan drug exclusivity in the United States. However, there can be no assurance that IDEC-Y2B8 will receive orphan drug exclusivity for the B-cell NHL indication, and it is possible that competitors of the Company could obtain approval, and attendant orphan drug exclusivity, for products similar to IDEC-Y2B8 for the B-cell NHL indication, thus precluding the Company from marketing IDEC-Y2B8 for that indication in the United States for some time. In addition, even if the Company does obtain orphan exclusivity for any of its compounds for B-cell NHL, there can be no assurance that competitors will not receive approval of other, different drugs or biologics for B-cell NHLs. Although obtaining FDA approval to market a product with orphan drug exclusivity can be advantageous, there can be no assurance that the scope of protection or the level of marketing exclusivity that is currently afforded by orphan drug designation will remain in effect in the future.

RESEARCH AND DEVELOPMENT

The Company's research and development group at January 31, 1999, totals 137 employees, of whom 30 have Ph.D. or M.D. degrees. Research and development expenses were $31.5 million, $32.4 million and $28.1 million in 1998, 1997 and 1996, respectively, of which approximately 53%, 63% and 44%, respectively, was sponsored by the Company and the remainder of which was funded pursuant to product development collaborations arrangements. See "Strategic Alliances."

ENVIRONMENTAL REGULATION

The Company's business and the business of several of its strategic partners, including Genentech, involves the controlled use of hazardous materials, chemicals, biologics and radioactive compounds. Biologics manufacture is extremely susceptible to product loss due to microbial or viral contamination, material

equipment failure, or vendor or operator error. Although the Company believes that its safety procedures for handling and disposing of such materials complies with state and federal standards, there will always be the risk of accidental contamination or injury. In addition, certain microbial or viral contamination may cause the closure of the respective manufacturing facility for an extended period of time. By law, radioactive materials may only be disposed of at state approved facilities. The Company currently stores its radioactive materials on-site because the approval of a disposal site in California for all California-based companies has been delayed indefinitely. If and when a disposal site is approved, the Company may incur substantial expenses related to the disposal of such material. If liable for an accident, or if the Company suffers an extended facility shutdown, the Company could incur significant expenses, damages and penalties that could have a material adverse effect on its business, financial condition and results of operations.

THE COMPANY'S EMPLOYEES

As of January 31, 1999, the Company employed 365 persons of which 121 employees were in manufacturing. In addition, the Company retained approximately 43 independent contractors. None of the Company's employees are represented by a labor union or bound by a collective bargaining agreement. Management believes that its overall relations with its employees are good.

ITEM 2. PROPERTIES

IDEC Pharmaceuticals currently leases approximately 118,000 square feet of administrative, laboratory, manufacturing and warehouse space at two locations in San Diego, California. The Company's principal executive offices, primary research facilities and manufacturing plant are located at 11011 Torreyana Road in San Diego, California. This facility is leased pursuant to a 15-year operating lease which commenced in 1993. The Company has the option to extend the term of the lease for two additional periods of five years each. In August 1996, the Company entered into a 7-year operating lease for additional administrative and warehouse space at 3030 Callan Road in San Diego, California. The Company has the option to extend the term of the Callan Road lease for two additional years.

ITEM 3. LEGAL PROCEEDINGS

(a) The Company is not a party to any material legal proceedings.

(b) No material legal proceedings were terminated in the fourth quarter of 1998.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of the Company's stockholders during the last quarter of the year ended December 31, 1998.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

(a) Market Information

The Company's common stock trades on The Nasdaq Stock Market under the symbol "IDPH." The following table sets forth the high and low sales price for the Company's common stock as reported by The Nasdaq Stock Market for the years ended December 31, 1998 and 1997.

	COMMON STOCK PRICE	
	HIGH	LOW
Year ended December 31, 1998		
First Quarter	$47 3/8	$32 3/4
Second Quarter	45 1/2	22 5/8
Third Quarter	29 7/8	17 1/4
Fourth Quarter	48 3/16	18 1/4
Year ended December 31, 1997		
First Quarter	$30 3/4	$19 7/8
Second Quarter	27 1/8	15 3/4
Third Quarter	42 7/16	23 3/8
Fourth Quarter	46 1/4	30 3/4

(b) Holders

As of January 29, 1999 there were approximately 367 stockholders of record of the Company's common stock.

(c) Dividends

The Company has not paid cash dividends since its inception. The Company currently intends to retain all earnings, if any, for use in the expansion of its business and therefore does not anticipate paying any dividends in the foreseeable future.

(d) Recent sales of unregistered securities.

In February 1999, the Company raised approximately $113.1 million in cash from the sale of $345.0 million, aggregate principal at maturity, of its Notes. The Notes were issued through a private offering exempt from registration under Section 4(2) of the Act and Rule 144A thereto, to the initial purchaser at a discount of $10.14 per $1,000 aggregate principal amount at maturity of the Notes, for resale to certain qualified institutional buyers (as defined in Rule 144A) and institutional "accredited investors" (as defined in Rule 501(a)(1),(2),(3) and (7) under the Act). Each $1,000 Note is convertible at the holder's option at any time through maturity into 6.734 shares of the Company's common stock at an initial conversion price of $50.17. The Company may redeem the Notes for cash at any time on or after February 16, 2004 through maturity. The holders of the Notes may require the Company to purchase the Notes on February 16, 2004, 2009, 2014 at a price equal to the issue price plus accrued original issue discount to the date of purchase with the Company having the option to repay the Notes plus accrued original issue discount in cash, the Company's common stock or a combination thereof.

The Company expects that the proceeds from the Notes will be used for general corporate purposes, including, but not limited to, funding U.S. licensing applications for IDEC-Y2B8 and if approved, commercialization of IDEC-Y2B8 in the United States; financial strategic acquisitions of products, product candidates, technologies or other business; financing the expansion of its facilities, including but not limited to design and engineering costs for expansion of the Company's manufacturing facility; potentially funding research and development activities through off-balance sheet transactions and funding general working capital requirements.

ITEM 6. SELECTED FINANCIAL DATA

The following tables set forth certain financial data with respect to IDEC Pharmaceuticals Corporation. The selected financial data should be read in conjunction with the consolidated financial statements and notes thereto appearing elsewhere in this Form 10-K.

	YEARS ENDED DECEMBER 31,				
	1998	1997	1996	1995	1994
	(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)				
CONSOLIDATED STATEMENTS OF OPERATIONS DATA:					
Revenues:					
Revenues from unconsolidated joint business	$ 53,813	$ 9,266	$ --	$ --	$ --
Contract revenues	14,846	11,840	15,759	12,136	5,143
License fees	18,300	23,500	14,250	11,500	2,300
	86,959	44,606	30,009	23,636	7,443
Operating costs and expenses:					
Manufacturing costs	19,602	18,875	--	--	--
Research and development	31,485	32,407	28,147	22,488	21,191
Selling, general and administrative	16,968	11,320	7,298	6,112	4,768
Acquired technology rights	--	--	--	11,437	--
	68,055	62,602	35,445	40,037	25,959
Income (loss) from operations	18,904	(17,996)	(5,436)	(16,401)	(18,516)
Interest income (expense), net	2,996	2,572	481	(891)	485
Income tax provision	(422)	(114)	--	--	--
Net income (loss)	21,478	(15,538)	(4,955)	(17,292)	(18,031)
Convertible preferred stock dividends	--	--	(696)	--	--
Net income (loss) applicable to common stock	$ 21,478	$(15,538)	$(5,651)	$(17,292)	$(18,031)
Earnings (loss) per common share:					
Basic	$ 1.08	$ (0.83)	$ (0.34)	$ (1.18)	$ (1.65)
Diluted	$ 0.92	$ (0.83)	$ (0.34)	$ (1.18)	$ (1.65)
Shares used in calculation of earnings (loss) per common share:					
Basic	19,838	18,739	16,573	14,650	10,931
Diluted	23,377	18,739	16,573	14,650	10,931

	DECEMBER 31,				
	1998	1997	1996	1995	1994
	(IN THOUSANDS)				
CONSOLIDATED BALANCE SHEETS DATA:					
Cash, cash equivalents and securities available-for-sale	$ 73,502	$ 69,657	$78,727	$ 24,760	$ 22,101
Total assets	125,273	106,013	113,029	47,626	45,494
Notes payable, less current portion	2,095	3,886	5,015	6,598	7,386
Accumulated deficit	(77,875)	(99,353)	(83,815)	(78,860)	(61,568)
Total stockholders' equity	$106,428	$ 80,679	$92,614	$ 31,169	$ 27,896

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the consolidated financial statements and related notes of IDEC Pharmaceuticals appearing elsewhere in this Form 10-K.

OVERVIEW

IDEC Pharmaceuticals is primarily engaged in the commercialization and research and development of targeted therapies for the treatment of cancer and autoimmune diseases. In November 1997, the Company received approval from the FDA to market the Company's first product, Rituxan, in the United States, and in

June 1998, Roche, the Company's European marketing partner, was granted marketing authorization for Rituximab in all European Union countries. Rituxan is the trade name in the United States for the compound Rituximab. Outside the United States, Rituximab is marketed as MabThera (Rituximab, Rituxan and MabThera are collectively referred to herein as Rituxan, except where otherwise indicated). Rituxan is being copromoted in the United States under a joint business arrangement with Genentech, with the Company receiving a share of the pretax copromotion profits. Under the terms of separate agreements with Genentech, commercialization of Rituxan outside the United States is the responsibility of Roche, except in Japan where Zenyaku will be responsible for product development, marketing and sales. The Company receives royalties on Rituxan sales outside the United States.

Revenues for the Company include revenues from unconsolidated joint business, contract revenues and license fees. Until the commercialization of Rituxan, a substantial portion of the Company's revenues had been derived from contract revenues and license fees. However, since the commercialization of Rituxan in November 1997, the Company's revenues have depended primarily upon the sale of Rituxan.

Revenues from unconsolidated joint business include the Company's share of the pretax copromotion profits generated from its joint business arrangement with Genentech, revenue from bulk Rituxan sales to Genentech and reimbursement from Genentech for the Company's sales force and development expenses. Revenues from unconsolidated joint business also include royalty income on sales of Rituxan outside the United States. Under the joint business arrangement, all U.S. sales of Rituxan and associated expenses will be recognized by Genentech, with the Company recording its share of the pretax copromotion profits on a quarterly basis, as defined in the Company's collaborative agreement with Genentech. Pretax copromotion profits under the joint business arrangement are derived by taking U.S. net sales of Rituxan to third party customers less cost of sales, third party royalty expenses, distribution, selling and marketing expenses and joint development expenses by the Company and Genentech. The Company's profit-sharing formula with Genentech has two tiers; the higher tier applies once a certain copromotional profit level is met. The profit-sharing formula resets to the lower tier on an annual basis, at year-end. In 1999, the Company expects the higher profit level to come into effect in the middle of the year.

Contract revenues include nonrefundable research and development funding under collaborative agreements with the Company's various strategic partners and other funding under contractual arrangements with other parties. Contract research and development funding generally compensates the Company for discovery, preclinical and clinical expenses related to the collaborative development programs for certain products of the Company.

License fees include nonrefundable fees from product development milestone payments, the sale of license rights to the Company's proprietary gene expression technology and nonrefundable fees from the sale of product rights under collaborative development and license agreements with the Company's strategic partners.

Contract revenues and license fees may vary from period to period and are in part dependent upon achievement of certain research and development objectives or the consummation of new corporate alliances. The magnitude and timing of contract revenues and license fees may influence the achievement and level of profitability for the Company.

The Company is in the process of completing a modification to its collaborative agreement with Genentech that will allow the Company to terminate early its obligations to supply to Genentech bulk Rituxan manufactured at the Company's manufacturing facility. Rather than supplying bulk Rituxan to Genentech through November 1999, the Company now anticipates transferring all manufacturing responsibilities for bulk Rituxan to Genentech at the end of the third quarter of 1999. The cost of bulk Rituxan sold to Genentech is recorded as manufacturing costs in the Company's consolidated statements of operations. Under the Company's collaborative agreement with Genentech, the sales price of bulk Rituxan sold to Genentech is capped at a price that is currently less than the Company's cost to manufacture bulk Rituxan. The Company anticipates using its available capacity for production of commercial inventory of IDEC-Y2B8, production of clinical material and some third party contract manufacturing.

The Company has incurred increasing annual operating expenses and, with the commercialization of Rituxan, the Company expects such trends to continue. The Company has incurred annual operating losses since its inception in 1985 and the sustained profitability of the Company will be dependent upon the continued commercial success of Rituxan, product investment, investments in product development and revenues from the achievement of product development objectives and licensing transactions. As of December 31, 1998, the Company had an accumulated deficit of $77.9 million.

RESULTS OF OPERATIONS

Revenues from Unconsolidated Joint Business: Revenues from unconsolidated joint business in 1998 totaled $53.8 million compared to $9.3 million in 1997. Revenues from unconsolidated joint business in 1998 reflect the financial results for the first full year of commercialization of Rituxan through the Company's collaboration with Genentech and includes copromotion profits generated from its joint business arrangement with Genentech, bulk Rituxan sales to Genentech, reimbursement from Genentech for the Company's Rituxan sales force and development expenses and royalty income on sales of Rituxan outside the United States. Under its agreement with Genentech, the Company's share of the pretax copromotion profits rose to a higher percentage upon achievement of an annual fixed profit target by the Rituxan joint business arrangement during the latter part of the third quarter of 1998. Revenues from unconsolidated joint business in 1997 consist of bulk Rituxan sales to Genentech and reimbursement from Genentech for the Company's Rituxan sales force and development expenses, offset by the Company's share of the joint business operating loss. During 1997, the joint business recorded an operating loss due to significant shared expenses related to the product launch of Rituxan in the United States in December 1997.

Rituxan net sales to third party customers in the United States by Genentech for the year ended December 31, 1998 amounted to $152.1 million. The Company believes pent-up demand for Rituxan was satisfied during the first quarter of 1998 and that subsequent sales growth was driven by increased adoption and use of Rituxan. Increased sales revenue also reflects the six percent increase in the wholesale price of Rituxan which was effected on October 5, 1998. During the fourth quarter of 1998, Genentech completed the transition from drop-shipment directly to end users to the standard practice of distribution of Rituxan via drug wholesalers.

Contract Revenues: Contract revenues totaled $14.8 million in 1998 compared to $11.8 million in 1997 and $15.8 million in 1996. The increase in contract revenues in 1998 resulted primarily from increased funding under collaborative agreements with Eisai that was offset in part by decreased research and development funding from Genentech and Seikagaku. The decrease in contract revenues in 1997 was primarily due to the completion of funding in 1996 under the Company's collaborative development agreement with Mitsubishi.

License Fees: License fees totaled $18.3 million in 1998 compared to $23.5 million in 1997 and $14.3 million in 1996. License fees in 1998 consist of a $10.0 million product development milestone payment from Genentech for European approval of Rituxan, a $6.3 million license fee from Kirin for the license of the Company's proprietary gene expression technology and a product development milestone payment for the Investigational New Drug allowance of IDEC-114, an investigational PRIMATIZED anti-B7 monoclonal antibody for the treatment of psoriasis, under the Company's collaboration with Mitsubishi. The increase in license fees in 1997 is due primarily to a $15.0 million product development milestone payment received from Genentech upon FDA approval of Rituxan. The Company continues to pursue other collaborative and license arrangements; however, no assurance can be given that any such arrangements will be realized.

Manufacturing Costs: Manufacturing costs totaled $19.6 million in 1998 compared to $18.9 million in 1997. Manufacturing costs for 1998 and 1997 relates to production of bulk Rituxan sold to Genentech. Manufacturing costs are recognized when bulk Rituxan inventory is accepted by Genentech. The Company is in the process of completing a modification to its collaborative agreement with Genentech that will allow the Company to terminate early its obligation to supply to Genentech bulk Rituxan manufactured at the Company's manufacturing facility. Rather than supplying bulk Rituxan to Genentech through November 1999, the Company anticipates transferring all manufacturing responsibilities for bulk Rituxan to Genentech at the end of the third quarter of 1999. Manufacturing costs in 1997 includes costs of approximately

$2.0 million incurred for the start-up of the Company's manufacturing facility. The Company expects to continue incurring substantial manufacturing costs and expenses as it anticipates using its available capacity for production of commercial inventory of IDEC-Y2B8, production of clinical material and some third party contract manufacturing.

Research and Development: Research and development expenses totaled $31.5 million in 1998 compared to $32.4 million in 1997 and $28.1 million in 1996. The decrease in research and development expenses in 1998 is due to a $3.0 million up-front licensing fee to Pharmacia & Upjohn for exclusive rights to 9-AC in 1997 partially offset by higher personnel and clinical trial expenses incurred during 1998. The increase in research and development expenses in 1997 was primarily due to the aforementioned licensing fee to Pharmacia & Upjohn, a license fee payment for anti-MIF antibody technology rights, contract manufacturing expenses for IDEC-Y2B8 in preparation for a Phase III trial in 1998 and higher facility expenses. Research and development expenses in 1997 were partially offset by the utilization of the Company's manufacturing facility for bulk production of Rituxan inventory in 1997 compared to research and development manufacturing production in 1996 of clinical material used for clinical trials. The Company expects to continue incurring substantial additional research and development expenses in the future, due to expansion or addition of research and development programs; technology in-licensing and regulatory-related expenses; preclinical and clinical testing of the Company's various products under development; and production scale-up and manufacturing of products used in clinical trials.

Selling, General and Administrative: Selling, general and administrative expenses totaled $17.0 million in 1998 compared to $11.3 million in 1997 and $7.3 million in 1996. Selling, general and administrative expenses increased in 1998 due to increased sales and marketing expenses resulting from the commercialization of Rituxan. The increase in selling, general and administrative expenses in 1997 was primarily due to the creation of a sales and marketing infrastructure, expenses resulting from the commercial launch of Rituxan and higher personnel expenses to support expanded manufacturing operations. Selling, general and administrative expenses necessary to support sales and administration, expanded manufacturing capacity, expanded clinical trials, research and development and the potential expansion of the sales and marketing organization are expected to increase in the foreseeable future.

Interest Income/Expense: Net interest income increased to $3.0 million in 1998 from $2.6 million in 1997 and $0.5 million in 1996. The increase in net interest income in 1998 was due to higher average balances in cash, cash equivalents and securities available-for-sale and a decrease in interest expense due to lower balances in notes payable. The increase in net interest income in 1997 was due to higher average balances in cash, cash equivalents and securities available-for-sale, a decrease in noncash interest charges for common stock warrants issued in connection with certain debt financings and a decrease in interest expense due to lower balances in notes payable. Net interest income is expected to decrease in the future due to the completion of a convertible zero coupon subordinated notes offering in February 1999. See "Liquidity and Capital Resources."

Income Tax Provision: The Company's effective tax rate in 1998 was approximately two percent and was the result of an alternative minimum tax system that only allows the utilization of net operating loss carryforwards to offset 90% of taxable income. At December 31, 1998, the Company has a valuation allowance equal to its deferred tax assets of $47.6 million since the Company has not established a pattern of profitable operations. Should the Company continue to have profitable operations in 1999, the Company believes that its deferred tax assets (comprised primarily of net operating loss carryforwards and research and experimentation credits) may become recoverable, and therefore, the Company would record the full tax benefits of its deferred tax assets in 1999. The Company's net operating loss carryforwards available to offset future taxable income at December 31, 1998 were approximately $72.0 million for federal income tax purposes and begin to expire in 1999. The future utilization of net operating loss carryforwards may be limited under the Internal Revenue Code (the "IRC") due to IRC defined ownership changes. The income tax provision for the year ended December 31, 1997 consists of state franchise tax.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operating and capital expenditures since inception principally through the sale of equity securities, commercialization of Rituxan, license fees, contract revenues, lease financing transactions and interest income. The Company expects to finance its current and planned operating requirements principally through cash on hand, proceeds from the convertible zero coupon subordinated notes offering discussed below, funds from its joint business arrangement with Genentech and with funds from existing collaborative agreements and contracts which the Company believes will be sufficient to meet its near-term operating requirements. Existing collaborative research agreements and contracts, however, could be canceled by the contracting parties. In addition, the Company may, from time to time seek additional funding through a combination of new collaborative agreements, strategic alliances and additional equity and debt financings or from other sources. There can be no assurance that such additional funds will be obtained through these sources on acceptable terms, if at all. Should the Company not enter into any such arrangements, the Company anticipates its cash, cash equivalents and securities available-for-sale, together with the existing agreements and contracts and cash generated from its notes offering and joint business arrangement, will be sufficient to finance the Company's currently anticipated needs for operating and capital expenditures for the foreseeable future. If adequate funds are not available from the joint business arrangement, operations or additional sources of financing, the Company's business could be materially and adversely affected.

The Company's working capital and capital requirements will depend upon numerous factors, including: the progress of the Company's preclinical and clinical testing; fluctuating or increasing manufacturing requirements and research and development programs; timing and expense of obtaining regulatory approvals; levels of resources that the Company devotes to the development of manufacturing, sales and marketing capabilities; technological advances; status of competitors; and the ability of the Company to establish collaborative arrangements with other organizations.

Until required for operations, the Company's policy under established guidelines is to keep its cash reserves in bank deposits, certificates of deposit, commercial paper, corporate notes, United States government instruments and other readily marketable debt instruments, all of which are investment-grade quality.

At December 31, 1998, the Company had $73.5 million in cash, cash equivalents and securities available-for-sale compared to $69.7 million at December 31, 1997. Sources of cash, cash equivalents and securities available-for-sale during the year ended December 31, 1998, included $5.1 million from operations and $4.3 million from the issuance of common stock issued under employee stock option and purchase plans. Uses of cash, cash equivalents and securities available-for-sale during the year ended December 31, 1998, included $1.7 million used to purchase capital equipment and $3.8 million used to pay notes payable.

In February 1999, the Company raised approximately $113.1 million, net of underwriting commissions, through the private sale of the Notes. The Notes were priced with a yield to maturity of 5.5 percent annually. Upon maturity, the notes will have an aggregate principal face value of $345.0 million. Each $1,000 aggregate principal face value Note is convertible at the holders' option at any time through maturity into 6.734 shares of the Company's common stock at an initial conversion price of $50.17. The Company is required under the terms of the Notes, as of 35 business days after a change in control occurring on or before February 16, 2004, to purchase any Note at the option of its holder at a price equal to the issue price plus accrued original issue discount to the date of repurchase. Additionally, the holders of the Notes may require the Company to purchase the Notes on February 16, 2004, 2009 or 2014 at a price equal to the issue price plus accrued original issue discount to the date of purchase with the Company having the option to repay the Notes plus accrued original issue discount in cash, the Company's common stock or a combination thereof.

In February 1997, the Company acquired worldwide rights from Pharmacia & Upjohn to 9-AC, a broad spectrum anti-cancer agent. Under the terms of the 9-AC asset transfer agreement, the Company may make payments to Pharmacia & Upjohn totaling up to $16.0 million, subject to the attainment of certain product development objectives. Depending on the results of the Company's Phase II study of solid tumors, it may achieve a product development objective in 1999 (commencement of a Phase III trial) that would result in the Company making a $6.0 million payment to Pharmacia & Upjohn. In the event the Company commences

Phase III trials, it may seek a strategic partner for development, marketing, distribution and sale of 9-AC in Europe, however, no assurances can be given that any such arrangement will result. In September 1997, the Company and CNI entered into a development and license agreement. Under the terms of the development and license agreement with CNI, the Company may make payments to CNI totaling up to $10.5 million, subject to the attainment of certain product development milestone events, of which $3.0 million has been paid through December 31, 1998.

Additionally, the Company had future minimum lease payment obligations under its operating leases of $33.0 million as of December 31, 1998.

In August 1995, the Company completed the receipt of funding under a $10.0 million lease financing agreement to finance both equipment and facility improvements. In July 1998, the Company made a $1.1 million principal payment as required under the terms of the financing agreement.

NEW ACCOUNTING STANDARD

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" (Statement No. 133). The statement requires companies to recognize all derivatives as either assets or liabilities with the instruments measured at fair value. The accounting for changes in fair value gains and losses depends on the intended use of the derivative and its resulting designation. The statement is effective for the Company on January 1, 2000. The Company does not believe the adoption of Statement No. 133 will have a material impact on the consolidated financial statements.

YEAR 2000 COMPLIANCE

Many currently installed computer systems and software products are coded to accept only two digit entries in the date code field. Beginning in the year 2000, these date code fields will need to accept four digit entries to distinguish 21st century dates from 20th century dates. As a result, computer systems and/or software used by many companies may need to be upgraded to comply with such "Year 2000" requirements.

The Company has several information system improvement initiatives underway and has appointed a program manager for its Year 2000 Program. The Company has completed an initial inventory and review of all system hardware, operating systems (including manufacturing and laboratory control systems) and application software in order to identify potential Year 2000 problems and has developed plans for and has begun implementing upgrades and testing in many systems. The Company's plan includes sending inquiries to its major third party suppliers and partners seeking comfort that they are Year 2000 compliant. The Company does not yet know the financial impact of making the required system and software modifications, but the Company currently expects such costs to be less than $2.0 million. The actual financial cost of correcting Year 2000 problems could, however, exceed this estimate if third party suppliers, manufacturers, service providers and others do not adequately address their Year 2000 issues or if the Company fails to successfully complete its initiatives.

The Company is currently relying upon Genentech to provide for all Year 2000-related contingency plans relating to the manufacture and sale of Rituxan; however, the Company has not received such contingency plans from Genentech. Genentech anticipates that contingency planning will begin in the first quarter of 1999. Any failure by Genentech to address issues which would result in their inability to timely produce Rituxan would have a material adverse impact on the Company's business. Additionally, the Company currently has no contingency plans to deal with any Rituxan or non-Rituxan related failures resulting from the Year 2000 issue. The Company expects to develop contingency plans during the second quarter of 1999.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to a variety of risks, including changes in interest rates affecting the return on its investments and the cost of its debt.

At December 31, 1998, the Company maintained a portion of its cash and cash equivalents in financial instruments with original maturities of three months or less. The Company also maintained a short-term investment portfolio containing financial instruments in which the majority have original maturities of greater than three months but less than twelve months. These financial instruments, principally comprised of high quality corporate and foreign debt securities and U.S. government securities, are subject to interest rate risk and will decline in value if interest rates increase. Due to the short duration of these financial instruments, an immediate ten percent increase in interest rates would not have a material effect on the Company's financial condition or results of operations. The Company has not used derivative financial instruments in its investment portfolio.

The Company's long-term debt at December 31, 1998 was comprised of notes payable and capital lease obligations, secured by equipment, lease deed of trust and patent and trademark collateral assignments, with a total balance of $4,005,000. The notes and lease obligations bear interest at a weighed average interest rate of 10.26%. Due to the relative immateriality of the notes payable and capital lease obligations, an immediate ten percent change in interest rates would not have a material effect on the Company's financial condition or results of operations.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT PAR VALUE DATA)

ASSETS

	DECEMBER 31,	
	1998	1997
Current assets:		
Cash and cash equivalents	$ 26,929	$ 34,847
Securities available-for-sale	46,573	34,810
Contract revenue receivables, net	2,345	3,971
Due from related party, net	17,473	--
Inventories	5,346	4,134
Prepaid expenses and other current assets	2,361	1,431
Total current assets	101,027	79,193
Property and equipment, net	20,897	23,449
Investment and other assets	3,349	3,371
	$125,273	$106,013
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of notes payable	$ 1,910	$ 3,908
Accounts payable	1,989	1,626
Accrued expenses	10,238	6,382
Due to related party, net	--	870
Deferred revenue	346	6,646
Total current liabilities	14,483	19,432
Notes payable, less current portion	2,095	3,886
Deferred rent	2,267	2,016
Commitments		
Stockholders' equity:		
Convertible preferred stock, $.001 par value, 8,000 shares authorized; 228 shares and 245 shares issued and outstanding at December 31, 1998 and 1997, respectively; $18,350 and $19,225 liquidation value at December 31, 1998 and 1997, respectively	--	--
Common stock, $.001 par value, 50,000 shares authorized; 20,121 shares and 19,356 shares issued and outstanding at December 31, 1998 and 1997, respectively	20	19
Additional paid-in capital	184,282	179,956
Accumulated other comprehensive income -- net unrealized gains on securities available-for-sale	1	57
Accumulated deficit	(77,875)	(99,353)
Total stockholders' equity	106,428	80,679
	$125,273	$106,013

See accompanying notes to consolidated financial statements.

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	YEARS ENDED DECEMBER 31,		
	1998	1997	1996
Revenues:			
Revenues from unconsolidated joint business	$53,813	$ 9,266	$ --
Contract revenues	14,846	11,840	15,759
License fees	18,300	23,500	14,250
Total revenues (including related party revenues of $64,014, $27,373 and $5,500 in 1998, 1997 and 1996, respectively)	86,959	44,606	30,009
Operating costs and expenses:			
Manufacturing costs	19,602	18,875	--
Research and development	31,485	32,407	28,147
Selling, general and administrative	16,968	11,320	7,298
Total operating costs and expenses	68,055	62,602	35,445
Income (loss) from operations	18,904	(17,996)	(5,436)
Interest income	3,626	3,489	3,178
Interest expense	(630)	(917)	(2,697)
Income (loss) before taxes	21,900	(15,424)	(4,955)
Income tax provision	(422)	(114)	--
Net income (loss)	21,478	(15,538)	(4,955)
Convertible preferred stock dividends	--	--	(696)
Net income (loss) applicable to common stock	$21,478	$(15,538)	$(5,651)
Earnings (loss) per common share:			
Basic	$ 1.08	$ (0.83)	$ (0.34)
Diluted	$ 0.92	$ (0.83)	$ (0.34)
Shares used in calculation of earnings (loss) per common share:			
Basic	19,838	18,739	16,573
Diluted	23,377	18,739	16,573

See accompanying notes to consolidated financial statements.

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(IN THOUSANDS)

	CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT	SHARES	AMOUNT				
Balance at December 31, 1995.....	207	--	15,061	$15	$110,004	$ 10	$(78,860)	$ 31,169
Issuance of common stock under stock option and employee stock purchase plans.....	--	--	342	--	1,304	--	--	1,304
Issuance of common stock in public offering.....	--	--	2,070	2	46,275	--	--	46,277
Issuance of common stock for services.....	--	--	17	--	359	--	--	359
Issuance of common stock from exercise of stock warrants.....	--	--	569	1	4,754	--	--	4,755
Issuance of series A-3 and series A-6 convertible preferred stock pursuant to terms of a collaborative agreement.....	123	--	--	--	12,500	--	--	12,500
Amortization of fair value change in common stock warrants.....	--	--	--	--	1,252	--	--	1,252
Change in unrealized gains (losses) on securities available-for-sale.....	--	--	--	--	--	(47)	--	(47)
Net loss.....	--	--	--	--	--	--	(4,955)	(4,955)
Balance at December 31, 1996.....	330	--	18,059	18	176,448	(37)	(83,815)	92,614
Issuance of common stock under stock option and employee stock purchase plans.....	--	--	670	1	3,508	--	--	3,509
Issuance of common stock from exercise of stock warrants.....	--	--	105	--	--	--	--	--
Issuance of common stock from conversion of series A-1 and B convertible preferred stock....	(85)	--	522	--	--	--	--	--
Change in unrealized gains (losses) on securities available-for-sale.....	--	--	--	--	--	94	--	94
Net loss.....	--	--	--	--	--	--	(15,538)	(15,538)
Balance at December 31, 1997.....	245	--	19,356	19	179,956	57	(99,353)	80,679
Issuance of common stock under stock option and employee stock purchase plans, net.....	--	--	565	1	4,326	--	--	4,327
Issuance of common stock from exercise of stock warrants.....	--	--	25	--	--	--	--	--
Issuance of common stock from conversion of series A-1 convertible preferred stock....	(17)	--	175	--	--	--	--	--
Change in unrealized gains on securities available-for-sale.....	--	--	--	--	--	(56)	--	(56)
Net income.....	--	--	--	--	--	--	21,478	21,478
Balance at December 31, 1998.....	228	$ --	20,121	$20	$184,282	$ 1	$(77,875)	$106,428

See accompanying notes to consolidated financial statements.

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

	YEARS ENDED DECEMBER 31,		
	1998	1997	1996
Cash flows from operating activities:			
Net income (loss)	$ 21,478	$(15,538)	$ (4,955)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	4,276	4,010	2,643
Deferred rent	251	503	390
Other non-cash expenses	--	(131)	(104)
Losses on sales of securities available-for-sale	--	(12)	--
Issuance of common stock for services	--	--	359
Amortization of fair value change in common stock warrants	--	--	1,252
Change in assets and liabilities:			
Contract revenue receivables, net	1,626	(336)	(3,712)
Due from related party, net	(17,473)	732	(732)
Inventories	(1,212)	250	(4,384)
Prepaid expenses and other assets	(908)	2,296	890
Accounts payable and accrued expenses	4,219	(1,049)	3,570
Due to related party, net	(870)	(130)	1,000
Deferred revenue	(6,300)	6,646	--
Net cash provided by (used in) operating activities	5,087	(2,759)	(3,783)
Cash flows from investing activities:			
Purchase of securities available-for-sale	(60,858)	(39,538)	(72,771)
Sales and maturities of securities available-for-sale	49,039	58,224	25,265
Purchase of property and equipment	(1,724)	(5,875)	(6,301)
Investment in Cytokine Networks, Inc	--	(3,000)	--
Net cash provided by (used in) investing activities	(13,543)	9,811	(53,807)
Cash flows from financing activities:			
Proceeds from notes payable	--	3,003	2,475
Payments on notes payable	(3,789)	(4,054)	(3,440)
Proceeds from issuance of common stock, net	4,327	3,509	52,564
Proceeds from issuance of convertible preferred stock, net	--	--	12,500
Net cash provided by financing activities	538	2,458	64,099
Net increase (decrease) in cash and cash equivalents	(7,918)	9,510	6,509
Cash and cash equivalents, beginning of year	34,847	25,337	18,828
Cash and cash equivalents, end of year	$ 26,929	$ 34,847	$ 25,337
Supplemental disclosures of cash flow information --			
Cash paid during the year for:			
Interest	$ 651	$ 952	$ 1,469
Income taxes	$ 401	$ --	$ --

See accompanying notes to consolidated financial statements.

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business: IDEC Pharmaceuticals is primarily engaged in the commercialization and research and development of targeted therapies for the treatment of cancer and autoimmune diseases.

Principles of Consolidation: The consolidated financial statements include the financial statements of IDEC Pharmaceuticals Corporation and its wholly owned subsidiary IDEC Seiyaku. All significant intercompany balances and transactions have been eliminated in consolidation.

Cash and Cash Equivalents: For the purposes of financial statement presentation, the Company considers all highly liquid investments in debt securities with original maturities of three months or less to be cash equivalents.

Securities Available-for-Sale: Securities available-for-sale are carried at fair value, with unrealized gains and losses, net of tax, reported as accumulated other comprehensive income -- net unrealized gains on securities available-for-sale in the accompanying consolidated balance sheets. The cost of securities sold is based on the specific identification method.

Inventories: Inventories are stated at the lower of cost or market. Cost is determined in a manner which approximates the first-in, first-out (FIFO) method. Inventories at December 31, 1998 and 1997 consist of the following (table in thousands):

	1998	1997
Raw materials	$2,273	$1,204
Work in process	273	486
Finished goods	2,800	2,444
	$5,346	$4,134

Property and Equipment: Property and equipment are stated at cost. Depreciation of property and equipment is calculated using the straight-line method over the estimated useful lives of the assets, generally ranging from three to seven years. Amortization of leasehold improvements is calculated using the straight-line method over the shorter of the lease term or the estimated useful lives of the assets.

Fair Value of Financial Instruments: The carrying amount of cash and cash equivalents, securities available-for-sale, contract revenue receivables, accounts payable and accrued expenses are considered to be representative of their respective fair values because of the short-term nature of those investments. The fair values of the Company's notes payable approximate carrying values based upon the current rates and terms offered to the Company for similar notes. A reasonable estimate of fair values is not practicable for the receivable, due from related party, at December 31, 1998 and the liability, due to related party, at December 31, 1997, because of the inherent difficulty of evaluating the timing of the payments.

Revenues from Unconsolidated Joint Business: Revenues from unconsolidated joint business consist of the Company's share of the pretax copromotion profits generated from its joint business arrangement with Genentech, revenue from bulk Rituxan sales to Genentech, reimbursement from Genentech of the Company's sales force and development expenses and royalty income from Roche on sales of Rituximab outside the United States. Rituxan is the trade name in the United States for the compound Rituximab. Outside the United States, Rituximab is marketed as MabThera (Rituximab, Rituxan and MabThera are collectively referred to herein as Rituxan, except where otherwise indicated). Under the joint business arrangement, all U.S. sales of Rituxan and associated costs and expenses will be recognized by Genentech, with the Company recording it's share of the pretax copromotion profits on a quarterly basis, as defined in the Company's collaborative agreement with Genentech (Note 7). Pretax copromotion profits under the joint business arrangement are derived by taking the U.S. net sales of Rituxan to third party customers less cost of sales, third party royalty expenses, distribution, selling and marketing expenses and joint development expenses

incurred by the Company and Genentech. Revenue from bulk Rituxan sales is recognized when bulk Rituxan is accepted by Genentech.

Contract Revenues: Contract revenues consist of nonrefundable research and development funding under collaborative agreements with the Company's various strategic partners and other funding under contractual arrangements with other parties. Contract research and development funding generally compensates the Company for discovery, preclinical and clinical expenses related to the collaborative development programs for certain products and product candidates of the Company and is recognized at the time research and development activities are performed under the terms of the collaborative agreements. Contract revenues earned in excess of contract payments received are classified as contract revenue receivables, and contract research and development funding received in excess of amounts earned are classified as deferred revenue. Contract revenue receivables at December 31, 1998 are net of an allowance of $775,000.

License Fees: License fees consist of nonrefundable fees from product development milestone payments, the sale of license rights to the Company's proprietary gene expression technology and nonrefundable fees from the sale of product rights under collaborative development and license agreements with the Company's strategic partners. Revenues from product development milestone payments are recognized when the results or events stipulated in the agreement have been achieved. License fee payments received in excess of amounts earned are classified as deferred revenue.

Manufacturing Costs: Manufacturing costs consist of manufacturing costs related to the production of bulk Rituxan sold to Genentech.

Research and Development: All research and development expenses, including purchased research and development, are expensed in the period incurred. Clinical grant expenses are fully accrued upon patient enrollment.

Stock-Based Compensation: The Company's stock option and purchase plans are accounted for under Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB Opinion No. 25"), and the Company makes pro forma footnote disclosures of the Company's operating results as if the Company had adopted the fair value method under Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("Statement No. 123").

Income Taxes: Income taxes are accounted for under the asset and liability method where deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Earnings (Loss) Per Common Share: Earnings (loss) per common share are calculated in accordance with Statement of Financial Accounting Standards No. 128 "Earnings per Share." Basic earnings (loss) per common share excludes the dilutive effects of options, warrants and other convertible securities compared to diluted earnings per share which reflects the potential dilution of options, warrants and other convertible securities that could share in the earnings of the Company. Calculations of basic and diluted earnings (loss) per common share use the weighted average number of shares outstanding during the year. Diluted earnings per common share for the year ended December 31, 1998 includes the dilutive effect of 3,538,000 shares of common stock from options, warrants and convertible preferred stock and excludes 1,217,000 shares of common stock from options because the options' exercise price was greater than the average market price of the Company's common stock for the year ended December 31, 1998. Options, warrants and convertible preferred stock totaling 4,181,000 shares and 4,538,000 shares were excluded from the calculations of diluted

loss per common share for the years ended December 31, 1997 and 1996, respectively, as their effect was antidilutive.

Use of Estimates: Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods to prepare these consolidated financial statements in conformity with generally accepted accounting principles. Actual results could differ from these estimates.

Comprehensive Income: As of January 1, 1998, the Company adopted Statement of Financial Accounting Standards No. 130 "Reporting Comprehensive Income" ("Statement No. 130"). Statement No. 130 establishes standards for the reporting and display of comprehensive income and its components. The adoption of Statement No. 130 did not have a significant impact on the Company's results of operations or financial position, as comprehensive income (loss) does not materially differ from net income (loss) applicable to common stock for the years ended December 31, 1998, 1997 and 1996.

NOTE 2: SECURITIES AVAILABLE-FOR-SALE

Securities available-for-sale at December 31, 1998 and 1997 consist of the following (tables in thousands):

	1998			
	AMORTIZED COSTS	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	MARKET VALUE
Corporate debt securities	$34,531	$32	$(41)	$34,522
Foreign debt securities	6,892	10	(4)	6,898
U.S. government agencies	5,149	5	(1)	5,153
	$46,572	$47	$(46)	$46,573

	1998			
	AMORTIZED COSTS	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	MARKET VALUE
Corporate debt securities	$13,672	$ 3	$(18)	$13,657
Commercial paper	4,707	44	--	4,751
Certificate of deposits	5,699	--	--	5,699
U.S. government agencies	10,675	29	(1)	10,703
	$34,753	$76	$(19)	$34,810

The amortized cost and estimated fair value of securities available-for-sale at December 31, 1998, by contractual maturity are shown below (table in thousands):

	AMORTIZED COST	ESTIMATED FAIR VALUE
Due in one year or less	$44,555	$44,559
Due after one year through two years	2,017	2,014
	$46,572	$46,573

NOTE 3: PROPERTY AND EQUIPMENT

Property and equipment at December 31, 1998 and 1997 consists of the following (table in thousands):

	1998	1997
Furniture and fixtures	$ 1,431	$ 1,226
Machinery and equipment	14,423	13,118
Leasehold improvements	18,939	18,922
Construction in progress	2,647	2,667
	37,440	35,933
Accumulated depreciation and amortization	(16,543)	(12,484)
	$ 20,897	$ 23,449

NOTE 4: NOTES PAYABLE

Notes payable at December 31, 1998 and 1997, consist of the following (table in thousands):

	1998	1997
Prime plus 1% note, due in monthly installments with a final payment of $750 due at maturity in 1998, secured by equipment, lease deed of trust, and a patent and trademark collateral assignment	$ --	$ 1,361
17.74% note, due in monthly installments with a final payment of $375 due at maturity in 1998, secured by equipment, lease deed of trust, and a patent and trademark collateral assignment	--	682
17.53% note, due in monthly installments with a final payment of $375 due at maturity in 1999, secured by equipment, lease deed of trust, and a patent and trademark collateral assignment	441	1,149
8.95% to 10.62% capital lease obligations, due in monthly installments, maturing in 2000	1,462	1,831
8.94% note, due in monthly installments, maturing in 2001, secured by equipment	2,102	2,771
	4,005	7,794
Current portion	(1,910)	(3,908)
	$ 2,095	$ 3,886

Machinery and equipment recorded under capital leases was $1,029,000 and $1,510,000, net of accumulated depreciation of $1,799,000 and $1,188,000, respectively, at December 31, 1998 and 1997, respectively.

The aggregate maturities of notes payable for each of the three years subsequent to December 31, 1998, are as follows: 1999, $1,910,000; 2000, $1,352,000; and 2001, $743,000.

NOTE 5: 401(k) EMPLOYEE SAVINGS PLAN

The Company has a qualified 401(k) Employee Savings Plan ("401(k) Plan"), available to substantially all employees over the age of 21. The Company may make discretionary contributions to the 401(k) Plan, which fully vest after four years of service by the employee. Discretionary contributions for the year ended December 31, 1998 totaled $410,000. There were no discretionary contributions for the years ended December 31, 1997 and 1996.

NOTE 6: RESEARCH AND DEVELOPMENT

In December 1995, the Company and Eisai entered into a collaborative development agreement and a license agreement aimed at the development and commercialization of humanized and PRIMATIZED anti-gp39 antibodies. Under the terms of these agreements, Eisai may provide up to $37,500,000 in product development milestone payments and support for research and development. Eisai will receive exclusive rights in Asia and Europe to develop and market resulting products emerging from the collaboration, with the Company receiving royalties on eventual product sales by Eisai. Eisai may terminate these agreements based on a reasonable determination that the products do not justify continued product development or marketing. Included in contract revenues for 1998, 1997 and 1996 is $9,019,000, $2,750,000 and $5,500,000, respectively, to fund product development, which approximates the research and development expenses incurred under the program. Included in license fees for the years ended December 31, 1997 and 1996 is $2,000,000 and $750,000, respectively, earned under these agreements.

In December 1994, the Company and Seikagaku entered into a collaborative development agreement and a license agreement aimed at the development and commercialization of a PRIMATIZED anti-CD23 antibody. Under the terms of these agreements, Seikagaku may provide up to $26,000,000 in product development milestone payments and support for research and development. The Company and Seikagaku will share co-exclusive, worldwide rights to all products emerging from the collaboration, with the Company receiving royalties on eventual product sales by Seikagaku. Seikagaku may terminate these agreements based on a reasonable determination that the products do not justify continued product development or marketing. Included in contract revenues for 1998, 1997 and 1996 is $2,500,000, $3,500,000 and $3,500,000, respectively, to fund product development, which approximates the research and development expenses incurred under the program. Included in license fees for the years ended December 31, 1997 and 1996 is $1,500,000 and $1,000,000, respectively, earned under these agreements.

In November 1993, the Company entered into a collaborative development agreement and a license agreement with Mitsubishi, for the development of a PRIMATIZED anti-B7 antibody. Under the terms of the collaboration, Mitsubishi may provide up to $12,185,000 in product development milestone payments and support for research and development. The Company retained certain marketing rights and will receive royalties on sales of any products commercialized by Mitsubishi emerging from the collaboration. Mitsubishi may terminate the license agreement if certain development objectives are not attained. The development agreement with Mitsubishi expired on December 31, 1996. Included in contract revenues for 1996 is $2,000,000 to fund product development, which approximates the research and development expenses incurred under the program. Included in license fees for the year ended December 31, 1998 is $2,000,000 earned under these agreements.

In October 1992, the Company and SB entered into a collaborative research and license agreement aimed at the development and commercialization of therapeutic products based on the Company's PRIMATIZED anti-CD4 antibodies. Under the terms of the agreement, the Company will receive aggregate payments that have the potential of reaching in excess of $60,000,000, subject to the attainment of certain product development milestone events. The Company will receive funding for anti-CD4 related research and development programs, royalties and a share of copromotion profits (in North America) on sales of products which may be commercialized as a result of the agreements. SB may terminate these agreements based on a reasonable determination that the products do not justify continued development or marketing. Included in contract revenues for 1998, 1997 and 1996 is $1,701,000, $867,000 and $416,000, respectively, to fund product development, which approximates the research and development expenses incurred under the program. Included in license fees for the year ended December 31, 1996 is $4,000,000 earned under the agreement.

The Company performed research under certain other contracts and, accordingly, realized revenues and recognized expenses in the accompanying consolidated statements of operations.

NOTE 7: RELATED PARTY ARRANGEMENTS

In March 1995, the Company and Genentech entered into a collaborative agreement for the clinical development and commercialization of the Company's anti-CD20 monoclonal antibody, Rituxan, for the treatment of certain B-cell non-Hodgkin's lymphomas. Concurrent with the collaborative agreement the Company and Genentech also entered into an expression technology license agreement for a proprietary gene expression technology developed by the Company and a preferred stock purchase agreement providing for certain equity investments in the Company by Genentech (Note 8). Under the terms of these agreements, the Company has received payments totaling $58,500,000. Additionally, the Company may be reimbursed by Genentech for certain other development and regulatory approval expenses under the terms of the collaborative agreement. Genentech may terminate this agreement for any reason, which would result in a loss of Genentech's Rituxan product rights. Included in contract revenues for 1998, 1997 and 1996 is $201,000, $2,389,000 and $1,500,000, respectively, to fund specific product development, which approximates the research and development expenses incurred under the program. Included in license fees for the years ended December 31, 1998, 1997 and 1996, is $10,000,000, $15,000,000 and $4,000,000, respectively, earned under these agreements.

In addition, the Company and Genentech are copromoting Rituxan in the United States under a joint business arrangement, with the Company receiving a share of the pretax copromotion profits. Although the Company has a contractual obligation to manufacture and supply bulk Rituxan through the end of 1999, the Company and Genentech are in the process of modifying the collaboration agreement to transfer all manufacturing activities for Rituxan to Genentech by the end of the third quarter in 1999. Under the Company's collaborative agreement with Genentech, the sales price of bulk Rituxan sold to Genentech is capped at a price that is currently less than the Company's cost to manufacture bulk Rituxan. Included in inventories at December 31, 1998, is $2,800,000 of bulk Rituxan inventory that is expected to be sold to Genentech. During 1997, the joint business recorded an operating loss due to significant shared expenses related to the product launch of Rituxan in the United States in December 1997. Revenues from unconsolidated joint business, as described in Note 1, for the years ended December 31, 1998 and 1997, consist of the following (table in thousands):

	1998	1997
Copromotion profit (loss)	$30,579	$(4,350)
Bulk Rituxan sales	15,043	10,631
Reimbursement of selling and development expenses	6,949	2,985
Royalty income	1,242	--
	$53,813	$ 9,266

Under the terms of separate agreements with Genentech, commercialization of Rituxan outside the United States will be the responsibility of Roche, except in Japan where Zenyaku Kogyo Co. Ltd. will be responsible for product development, marketing and sales. The Company will receive royalties on sales outside the United States. Additionally, the Company will receive royalties on sales of Genentech products manufactured using the Company's proprietary gene expression system.

NOTE 8: STOCKHOLDERS' EQUITY

Convertible Preferred Stock: In March 1995, the Company issued 1,000,000 shares of its common stock and 69,375 shares of its ten percent Series B Nonvoting Cumulative Convertible Preferred Stock ("Series B Preferred Stock") for the repurchase of all Merrill Lynch/Morgan Stanley, L.P. ("ML/MS") rights in the Company's lymphoma products. In March 1997, the Series B Preferred Stock and accrued dividends were converted into 367,000 shares of the Company's common stock.

Additionally, the Company issued 22,993 shares of its Series A-3 Nonvoting Convertible Preferred Stock ("Series A-3 Preferred Stock") in March 1996, 100,000 shares of its Series A-6 Nonvoting Convertible Preferred Stock ("Series A-6 Preferred Stock") in May 1996, 100,000 shares of its Series A-1 Nonvoting Convertible Preferred Stock ("Series A-1 Preferred Stock") in April 1995, and 37,521 shares of its Series A-2 Nonvoting Convertible Preferred Stock ("Series A-2 Preferred Stock") in August 1995, to Genentech pursuant to the terms of a preferred stock purchase agreement. The preferred stock purchase agreement was entered into concurrently with a collaboration agreement as described in Note 7. The Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and Series A-6 Preferred Stock have a liquidation preference per share of $50, $67, $217 and $75, respectively, net of issuance costs. Each share of Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock is convertible at any time into ten shares of the Company's common stock and each share of Series A-6 Preferred Stock is convertible at any time into approximately 2.16 shares of the Company's common stock. In January 1998 and December 1997, 18,000 shares and 16,000 shares of Series A-1 Preferred Stock were converted into 175,000 shares and 155,000 shares, respectively, of the Company's common stock.

Common Stock: In May 1996, the stockholders approved an increase in the number of authorized common shares to 50,000,000 shares. In June 1996, the Company completed a public offering of 2,070,000 shares of its common stock resulting in net proceeds of $46,277,000.

In September, 1997, the Company sold to a financial institution a call option, exercisable only at maturity, entitling the financial institution to purchase from the Company up to 900,000 shares of the Company's common stock. Also in September, 1997, the Company purchased from the financial institution a call option, exercisable only at maturity, to purchase from the financial institution up to 600,000 shares. Both options expired in September 1998 at no cost to the Company and neither the Company nor the financial institution exercised their respective option.

Stockholder Rights Agreement: In July 1997, the Company's Board of Directors declared a dividend of one preferred stock purchase right ("Right") for each outstanding share of the Company's common stock. Each Right represents the right to purchase one one-thousandth of a share of series X junior participating preferred stock at an exercise price of $200, subject to adjustment, and will be exercisable only if a person or group acquires 15% or more of the Company's common stock or announces a tender offer for 15% or more of the Company's common stock. If a person acquires 15% or more of the Company's common stock all Rightsholders, except the acquiring person, will be entitled to buy shares of the Company's common stock at a discount. Each series X junior participating preferred stock will be entitled to an aggregate dividend of 1000 times the dividend declared per common stock. The Board of Directors may terminate the Stockholder Rights Agreement at any time or redeem the Rights at $.001 per Right, prior to the time a person acquires more than 15% of the Company's common stock. The Rights will expire in July 2007.

Stock Option Plans: The Company has two active stock option plans.

The 1988 Employee Stock Option Plan (the "Option Plan") was approved by the stockholders in 1988 and has been subsequently amended. Under the Option Plan, options for the purchase of the Company's common stock may be granted to key employees (including officers), directors and outside consultants. Options may be designated as incentive stock options or as nonqualified stock options and generally vest over four years, except under a provision of the Option Plan which allows accelerated vesting under certain conditions. Options under the Option Plan, which have a term of up to ten years, are exercisable at a price per share not less than the fair market value (85 percent of fair market value for nonqualified options) on the date of grant. The aggregate number of shares authorized for issuance under the Option Plan as of December 31, 1998 is 6,335,000 shares.

In September 1993, the Company adopted the 1993 Non-Employee Directors Stock Option Plan (the "Directors Plan"), which was approved by the stockholders in May 1994 and was subsequently amended. As

of December 31, 1998, a total of 370,000 shares of common stock were reserved for issuance to individuals who serve as non-employee members of the Board of Directors. Options under the Directors Plan, which have a term of up to ten years, are exercisable at a price per share not less than the fair market value on the date of grant.

A summary of the status of the Company's two active stock option plans as of December 31, 1998, 1997 and 1996 and changes during the years ended on those dates is presented below (table in thousands, except per share amounts):

	DIRECTORS PLAN		OPTION PLAN	
	SHARES	WEIGHTED AVERAGE EXERCISE PRICE	SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding at December 31, 1995.....	85	$ 4.15	2,467	$ 2.97
Granted.....	35	19.13	1,443	20.79
Exercised.....	(10)	4.00	(172)	2.43
Cancelled.....	(5)	19.13	(196)	10.10
Outstanding at December 31, 1996.....	105	8.45	3,542	9.86
Granted.....	83	27.41	815	26.27
Exercised.....	(15)	9.04	(533)	4.26
Cancelled.....	(5)	22.50	(43)	18.74
Outstanding at December 31, 1997.....	168	17.31	3,781	14.09
Granted.....	30	33.88	784	36.18
Exercised.....	(22)	4.38	(484)	6.28
Cancelled.....	--	--	(84)	25.75
Outstanding at December 31, 1998.....	176	$21.75	3,997	$19.12

The following table summarizes combined information about the Directors Plan and the Option Plan options outstanding as of December 31, 1998 (table in thousands, except year and per share amounts):

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	NUMBER OUTSTANDING	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE
$ 0.88 - $ 2.56.....	449	4.85	$ 2.44	444	$ 2.44
3.00 - 19.13.....	1,042	5.98	5.69	917	4.95
20.13 - 22.50.....	1,196	7.31	20.36	805	20.33
24.38 - 31.50.....	836	8.66	27.81	250	26.58
33.50 - 44.50.....	650	9.05	39.45	122	36.96

Employee Stock Purchase Plan: In May 1993, the stockholders adopted the Company's Employee Stock Purchase Plan (the "Purchase Plan"), which was subsequently amended. As of December 31, 1998 a total of 495,000 shares of common stock were reserved for issuance. Under the terms of the Purchase Plan, employees can choose to have up to ten percent of their annual compensation withheld to purchase shares of common stock. The purchase price of the common stock is at 85 percent of the lower of the fair market value of the common stock at the enrollment or purchase date. During 1998, 1997 and 1996, 68,000 shares, 122,000 shares and 160,000 shares, respectively, were issued under the Purchase Plan.

Pro Forma Information: The Company has retained the approach under APB Opinion No. 25 and related interpretations in accounting for its stock option and purchase plans. Accordingly, no compensation expense has been recognized for its Option Plan, Directors Plan and Purchase Plan. Had compensation expense for the Company's stock option and purchase plans been determined consistent with Statement No. 123, earnings per share applicable to common stock would have been decreased and the Company's loss

per share applicable to common stock would have been increased to the pro forma amounts indicated below (table in thousands, except per share amounts):

	1998	1997	1996
Net income (loss) applicable to common stock			
As reported	$21,478	$(15,538)	$ (5,651)
Pro forma	8,511	(23,746)	(10,152)
Earnings (loss) per common share, as reported			
Basic	$ 1.08	$ (0.83)	$ (0.34)
Diluted	0.92	(0.83)	(0.34)
Earnings (loss) per common share, pro forma			
Basic	$ 0.43	$ (1.27)	$ (0.61)
Diluted	0.36	(1.27)	(0.61)

Pro forma net income (loss) applicable to common stock reflects only stock option and purchase rights granted in 1998, 1997 and 1996. Therefore, the full impact of calculating compensation expense for stock options and stock purchase rights under Statement No. 123 is not reflected in the pro forma net income (loss) amounts presented above since compensation expense is reflected over the stock option vesting and stock purchase subscription periods and compensation expense for stock options and stock purchase rights granted prior to January 1, 1995 are not considered. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants in 1998, 1997 and 1996: dividend yield of zero percent; expected volatility of 53.7 percent; risk-free interest rate of 4.7 percent; and an expected option life of 6.3 years for 1998; dividend yield of zero percent; expected volatility of 61.4 percent; risk-free interest rate of 6.3 percent; and an expected option life of 5.7 years for 1997; and a dividend yield of zero percent; expected volatility of 66.8 percent; risk-free interest rate of 6.2 percent; and an expected option life of 5.5 years for 1996. The per share weighted-average fair value of stock options granted during 1998, 1997 and 1996 at an exercise price equal to the fair market value on the date of grant was $20.76, $16.09 and $13.25, respectively, on the date of grant using the Black-Scholes option-pricing model. The fair value of each purchase right is estimated on the date of enrollment using the Black-Scholes option-pricing model with the following weighted average assumptions used in 1998, 1997 and 1996: dividend yield of zero percent; expected volatility of 53.7 percent; risk-free interest rate of 4.7 percent; and an expected life between 0.3 year and 1.0 year for 1998: dividend yield of zero percent; expected volatility of 61.4 percent; risk-free interest rates between 5.5 percent and 6.0 percent; and an expected life between 0.3 year and 2.0 years for 1997; and a dividend yield of zero percent; expected volatility of 66.8 percent; risk-free interest rates between 5.6 percent and 5.9 percent; and an expected life between 0.3 year and 2.0 years for 1996. The per share weighted-average fair value of stock purchase rights granted during 1998, 1997 and 1996 was $8.31, $10.50 and $9.05, respectively, on the subscription date using the Black-Scholes option-pricing model.

Stock Warrants: Under an investment agreement and in part subject to the Company's accomplishment of certain research and development objectives, SR One Limited, SB venture capital subsidiary, purchased 200,000 common stock warrants in each 1993 and 1992. In October 1996, these warrants were exercised for 400,000 shares of the Company's common stock resulting in net proceeds of $4,755,000.

In December 1994 and August 1995, concurrent with the completion of a debt financing, the Company issued warrants for the purchase of 294,000 shares and 46,000 shares, respectively, of common stock. In 1998, 1997 and 1996, 30,000 warrants, 114,000 warrants and 196,000 warrants, respectively, were exchanged for 25,000 shares, 105,000 shares and 169,000 shares, respectively, of the Company's common stock.

NOTE 9: INCOME TAXES

The provision for income taxes for the year ended December 31, 1998 includes the following (table in thousands):

	1998
Current Provision:	
Federal	$ 248
State	174
	$ 422

A reconciliation between the Company's effective tax rate and the U.S statutory rate for the year ended December 31, 1998 follows:

	1998
Tax at U.S. statutory rate	35.0%
Adjustment of deferred items	(33.1)%
	1.9%

The following table summarizes the tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities at December 31, 1998 and 1997 (table in thousands):

	1998	1997
Deferred tax assets:		
Accrued expenses	$ 1,295	$ 609
Property and equipment, principally due to difference in depreciation	1,563	932
Deferred rent expense	925	803
Inventories	805	--
Amortization of fair value change in common stock warrants	--	770
Deferred revenue	--	2,372
Capitalized state research and experimentation costs	2,625	2,189
Acquired technology rights	4,556	3,695
Research and experimentation credit	8,993	6,070
Net operating loss carryforwards	25,806	29,601
Other tax assets	996	696
Total gross deferred tax assets	47,564	47,737
Valuation allowance	(47,564)	(47,737)
Net deferred taxes	$ --	$ --

In 1998 the Company recognized a decrease in the valuation allowance of $173,000 and in 1997 and 1996, the Company recognized an increase in the valuation allowance of $9,291,000 and $3,882,000, respectively. At December 31, 1998 and 1997 the Company had a valuation allowance equal to its deferred tax assets since the Company has not established a pattern of profitable operations.

As of December 31, 1998, the Company had net operating loss and research and experimentation tax credit carryforwards for Federal income tax purposes of approximately $72,000,000 and $7,000,000, respectively, which expire beginning in 1999. Net operating loss carryforwards and research and experimentation tax credit carryforwards as of December 31, 1998 for state income tax purposes are approximately $6,000,000 and $3,000,000, respectively, which expire beginning in 2011 and 1999, respectively. The utilization of net

operating losses and tax credits may be subject to an annual limitation under the Internal Revenue Code, due to a cumulative change in ownership of more than fifty percent.

NOTE 10: COMMITMENTS

Lease Commitments: In July 1992, the Company entered into a 15-year operating lease for its headquarters, which commenced in 1993. The Company has the option to extend the term of the lease for two additional periods of five years each. In August 1996, the Company entered into a 7-year lease for additional office and warehouse facilities. The Company has the option to extend the term of this lease for two additional years. In addition to the monthly lease payments, both lease agreements provide for the Company to pay all operating expenses associated with the facilities. The lease agreements provide for scheduled rental increases; accordingly lease expense is recognized on a straight-line basis over the term of the leases.

Future minimum lease payments under all operating leases as of December 31, 1998, are as follows (table in thousands):

1999	$ 3,423
2000	3,559
2001	3,702
2002	3,850
2003	3,740
2004 and thereafter	14,705
Total minimum lease payments	$32,979

Lease expense under all operating leases totaled $3,565,000, $3,677,000 and $3,011,000 for the years ended December 31, 1998, 1997 and 1996, respectively.

License Agreements: In September 1997, the Company and CNI entered into a development and license agreement for the development of inflammatory and autoimmune disease products based upon CNI's anti-MIF antibody technology. Concurrent with the development and license agreement the Company and CNI entered into a stock purchase agreement providing for certain equity investments in CNI by the Company. Under the terms of these agreements, the Company may make payments totaling $10,500,000, subject to the attainment of certain product development milestone events. Additionally, the Company will pay CNI royalties on sales by the Company of any products emerging from the collaboration. In 1997, the Company made a $3,000,000 preferred equity investment in CNI.

In February 1997, the Company acquired exclusive rights from Pharmacia & Upjohn to 9-aminocamptothecin ("9-AC"), a broad spectrum, anti-cancer agent for the treatment of cancer. Under the terms of the asset transfer agreement, the Company may make payments totaling $16,000,000, subject to the attainment of certain product development objectives. If the Company achieves certain product development objectives in 1999 (commencement of a Phase III trial) the Company would be required to make a $6,000,000 payment to Pharmacia and Upjohn. In the event the Company commences Phase III trials, it may seek a strategic partner for development, marketing, distribution and sale of 9-AC in Europe, however, no assurances can be given that any such arrangements will result. In 1997, the Company made an up-front licensing payment of $3,000,000.

In connection with its research and development efforts, the Company has entered into various other license agreements which provide the Company with rights to develop, produce and market products using certain know-how, technology and patent rights maintained by the parties. Terms of the various license agreements require the Company to pay royalties from future sales, if any, on specified products using the resulting technology. Third party royalty liabilities resulting from sales of Rituxan are being paid by Genentech and recorded under the joint business arrangement as described under "Revenues from Unconsoli-

dated Joint Business" in Notes 1 and 7. As of December 31, 1998, such other royalties, other than annual minimum royalty payments, have not commenced on the aforementioned license agreements.

NOTE 11: SUBSEQUENT EVENT

In February 1999, the Company raised approximately $113,090,000, net of underwriting commissions, through the private sale of 20-year convertible zero coupon subordinated notes ("Notes"). The Notes were priced with a yield to maturity of 5.5 percent annually. Upon maturity, the notes will have an aggregate principal face value of $345,000,000. Each $1,000 aggregate principal face value Note is convertible at the holders' option at any time through maturity into 6.734 shares of the Company's common stock at an initial conversion price of $50.17. The Company is required under the terms of the Notes, as of 35 business days after a change in control occurring on or before February 16, 2004, to purchase any Note at the option of its holder at a price equal to the issue price plus accrued original issue discount to the date of repurchase. Additionally, the holders of the Notes may require the Company to purchase the Notes on February 16, 2004, 2009 or 2014 at a price equal to the issue price plus accrued original issue discount to the date of purchase with the Company having the option to repay the Notes plus accrued original issue discount in cash, the Company's common stock or a combination thereof.

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
IDEC Pharmaceuticals Corporation:

We have audited the accompanying consolidated balance sheets of IDEC Pharmaceuticals Corporation and subsidiary as of December 31, 1998 and 1997, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 1998. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of IDEC Pharmaceuticals Corporation and subsidiary as of December 31, 1998 and 1997, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 1998, in conformity with generally accepted accounting principles.

KPMG LLP

San Diego, California
February 2, 1999, except as to Note 11, which is as of March 1, 1999

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Certain information about the Company's executive officers as of January 31, 1999 is set forth below:

NAME	AGE	TITLE
William H. Rastetter, Ph.D.	50	Chairman, President and Chief Executive Officer
Antonio J. Grillo-Lopez, M.D.	59	Chief Medical Officer
Nabil Hanna, Ph.D.	55	Chief Scientific Officer
William R. Rohn	55	Chief Operating Officer
Christopher J. Burman	49	Senior Vice President, Manufacturing and Process Sciences
John Geigert, Ph.D.	51	Vice President, Quality
Connie L. Matsui	45	Vice President, Planning and Resource Development
Phillip M. Schneider	42	Vice President and Chief Financial Officer
Kenneth J. Woolcott	40	Vice President, Secretary, General Counsel and Licensing Executive

DR. RASTETTER was appointed Chairman of the Board of Directors of the Company on May 22, 1996. He has served as President and Chief Executive Officer of the Company since December 1986 and Chief Financial Officer from 1988 to 1993. Dr. Rastetter has served as a Director of the Company since 1986. From 1984 to 1986, he was Director of Corporate Ventures at Genentech. From 1982 to 1984, Dr. Rastetter served in a scientific capacity at Genentech, directing the Biocatalysis and Chemical Sciences groups. From 1975 to 1982, he held various faculty positions at the Massachusetts Institute of Technology. Dr. Rastetter is also a director of Spiros Development Corporation II, Inc. Dr. Rastetter received his Ph.D. in chemistry from Harvard University in 1975.

MR. BURMAN joined the Company in May 1992 as Vice President, Manufacturing Sciences and has served as Senior Vice President, Manufacturing and Process Sciences since December 1997. He previously served from 1989 to 1992 as Director of Manufacturing Technology at Life Sciences International. From 1985 to 1989, he was t-PA Operations and Technical Services Manager at Genentech, where he was responsible for the start-up of the t-PA manufacturing facility and commercial-scale manufacturing operations. From 1967 to 1985, he held a series of positions at Wellcome Biotech Ltd., culminating in responsibility for worldwide cell culture manufacturing operations. Mr. Burman holds a B.Sc. with honors in Applied Biology from the Council for National Academic Awards in the United Kingdom. He also holds graduate qualifications in Industrial Microbiology.

DR. GRILLO-LOPEZ joined the Company as Vice President, Medical and Regulatory Affairs in November 1992 from Du Pont Merck Pharmaceutical Company ("Du Pont Merck"). Dr. Grillo-Lopez was promoted to Senior Vice President, Medical and Regulatory Affairs in January 1996 and Chief Medical Officer in May 1998. He was employed by Du Pont Merck from 1987 to 1992, where he most recently was Executive Medical Director for International Clinical Research and Development and previously held various clinical and medical director positions at Du Pont Merck. From 1980 to 1987, Dr. Grillo-Lopez was a Vice President in charge of clinical therapeutics and Director of Clinical Oncology Research at Warner Lambert Company's Parke Davis Pharmaceutical Research Division. He trained as a hematologist and oncologist at the University of Puerto Rico School of Medicine, San Juan, where he received his M.D. and subsequently held faculty appointments. He has been an adjunct associate professor in the Department of Medicine (Hematology and Medical Oncology) at the University of Michigan Medical School, was a founder of the Puerto Rico

Society of Hematology and the Latin American Society of Hematology, and is a fellow of the International Society of Hematology and the Royal Society of Medicine (London).

DR. HANNA joined the Company in February 1990 as Vice President, Research and Preclinical Development. In August 1993, Dr. Hanna was promoted to Senior Vice President, Research and Preclinical Development and in May 1998 he was promoted to Chief Scientific Officer. From 1981 to 1990, Dr. Hanna served as Associate Director and then Director of the Department of Immunology at SB focusing on autoimmune and chronic inflammatory diseases. From 1978 to 1981, he was a research scientist at the NCI-Frederick Cancer Research Center, where he studied the role of immune system cells in host defenses against cancer. From 1973 to 1978, Dr. Hanna was a lecturer in the Department of Immunology at the Hebrew University Medical School in Israel, where he received his Ph.D. in Immunology. Pursuant to the Company's agreement with CNI, Dr. Hanna is a director of CNI.

MR. ROHN joined the Company in August 1993 as Senior Vice President, Commercial and Corporate Development. Mr. Rohn was appointed Senior Vice President, Commercial Operations in April 1996 and was promoted to Chief Operating Officer in May 1998. Prior to joining the Company, Mr. Rohn was employed by Adria Laboratories ("Adria"), from 1984 until August 1993, most recently as Senior Vice President of Sales and Marketing with responsibilities for strategic and commercial partnerships as well as all sales and marketing functions in the United States. Prior to Adria, Mr. Rohn held marketing and sales management positions at Abbott Laboratories, Warren-Teed Pharmaceuticals, Miles Laboratories and Mead Johnson Laboratories. Mr. Rohn received a B.A. in Marketing from Michigan State University.

DR. GEIGERT joined the Company in May 1996 as Vice President, Quality. He previously served from 1991 to May 1996 as Vice President, Quality Control at Immunex Corporation, a biotechnology company. From 1973 to 1991, he was employed by Cetus Corporation where he served most recently as Director of Quality Control and Product Evaluation. Dr. Geigert holds a B.S. degree in Chemistry from Washington State University and a Ph.D. in Organic Chemistry/Analytical Chemistry from Colorado State University.

MS. MATSUI joined the Company in November 1992 as Senior Director, Planning and Resource Development with primary responsibility for strategic planning and human resources. In December 1994, Ms. Matsui was promoted to Vice President, Planning and Resource Development. Ms. Matsui's current responsibilities include investor relations, corporate communications, human resources, project management and strategic planning. As a consultant during 1992, Ms. Matsui assisted in the planning and implementation of the Company's unification from sites in Northern and Southern California to its present site in San Diego. From 1977 to 1991, she served in a variety of marketing and general management positions at Wells Fargo Bank including Vice President and Manager responsible for Consumer Retirement Programs and Vice President and Manager in charge of company-wide Employee Relations and Communications. Ms. Matsui received her B.A. and M.B.A. from Stanford University.

MR. SCHNEIDER joined the Company in February 1987 as Director, Finance and Administration and served as Senior Director, Finance and Administration from 1990 to 1991. In November 1991, he became Vice President, Finance and Administration and in February 1996 he was appointed Vice President and Chief Financial Officer. From 1984 to 1987, Mr. Schneider served as the Manager of Financial Reporting and as a Senior Analyst for Syntex Laboratories. He received a B.S. in biochemistry from University of California, Davis, received his M.B.A. at the University of Southern California and earned his C.P.A. qualifications while working for KPMG LLP.

MR. WOOLCOTT joined the Company in March 1989 as Intellectual Property Counsel. In 1990, he became Intellectual Property and Licensing Counsel. Mr. Woolcott was promoted to Deputy General Counsel in 1991 and General Counsel in 1992. In 1993, Mr. Woolcott was appointed Secretary of the Company. In 1994, he was promoted to Vice President, Secretary, General Counsel & Licensing Executive. From 1985 to 1987, he served as Patent Counsel and Associate Counsel at Hybritech, Inc. From 1987 to 1989, he was engaged in the private practice of law in Seattle, Washington. Mr. Woolcott received a B.S. in Biochemistry from Pacific Lutheran University and his J.D. from George Washington University.

The information required by this item in regards to the identification of Directors is hereby incorporated by reference to the information contained under the caption "Election of Directors" in the Company's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999.

The information required by Section 16(a) is hereby incorporated by reference to the information contained under the caption "Compliance with Section 16(a) of the Securities Exchange Act of 1934" in the Company's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is hereby incorporated by reference to the information contained under the caption "Executive Compensation and Related Information" in the Company's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item is hereby incorporated by reference to the information contained under the caption "Security Ownership of Certain Beneficial Owners and Management" in the Company's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is hereby incorporated by reference to the information contained under the caption "Certain Relationships and Related Transactions" in the Company's Proxy Statement for its Annual Meeting of Stockholders to be held on May 20, 1999.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

SCHEDULE NUMBER	DESCRIPTION
II	Valuation and qualifying accounts

All other financial statements schedules are omitted because they are not required or are not applicable, or because the required information is included in the financial statements or notes thereto.

(3) EXHIBITS:
The following exhibits are referenced or included in this report.

EXHIBIT NUMBER	DESCRIPTION
1.1	Purchase Agreement for $300,000,000 Liquid Yield Option Notes(TM) due 2019 (Zero Coupon -- Subordinated) dated as of February 9, 1999 between the Registrant and Merrill Lynch, Pierce, Fenner & Smith Incorporated.
2.1(1)	Agreement and Plan of Merger dated as of April 5, 1997 between the Registrant and IDEC California.
3.1(1)	Amended and Restated Articles of Incorporation of the Registrant.
3.2(1)	Bylaws of the Registrant.
4.1	Reference is made to Exhibit 3.1.
4.2	Reference is made to Exhibit 3.2.
4.3(2)	1992 Amended and Restated Registration Rights Agreement of IDEC California.
4.4(1)	Specimen Common Stock Certificate of the Registrant.
4.5	Reference is made to Exhibit 10.46.
4.6(7)	1995 Registration Rights Agreement of the Registrant.
4.8(18)	Preferred Share Purchase Rights.
4.9	First Amendment to the Preferred Share Purchase Rights Agreement, dated July 22, 1997.
4.10	Indenture dated as of February 16, 1999 between the Registrant and Chase Manhattan Bank and Trust Company, National Association.
4.11	Reference is made to Exhibit 1.1

EXHIBIT NUMBER	DESCRIPTION
10.1(17)	1988 Stock Option Plan of the Registrant, as amended and restated through February 20, 1998.
10.2(13)	Form of Notice of Grant.
10.3(13)	Form of Option Agreement.
10.4(12)	Letter Agreement between the Registrant and Genentech, Inc., dated May 21, 1996.
10.5(2)	401(k) Plan of the Registrant.
10.6(2)	Form of acceleration of vesting letter agreement between the Registrant and certain officers.
10.7(2)+	License Agreement with Coulter Immunology, dated May 16, 1991.
10.8(3)	Lease Agreement between the Registrant and Torrey Sorrento, Inc., dated July 9, 1992.
10.9(3)+	Collaborative Research and License Agreement between the Registrant and SmithKline Beecham p.l.c., dated October 12, 1992.
10.10(3)	Investment Agreement between the Registrant and S.R. One, Limited, dated October 16, 1992.
10.11(13)	1995 Employee Stock Purchase Plan, as amended and restated through May 22, 1997.
10.12(4)+	Collaborative Development Agreement between the Registrant and Mitsubishi Chemical Corporation, dated November 11, 1993.
10.13(4)	Employment Agreement between the Registrant and Dr. Antonio Grillo-Lopez dated September 25, 1992.
10.14(17)	1993 Non-Employee Directors Stock Option Plan, as amended and restated through February 20, 1998.
10.15(6)+	Collaborative Development Agreement between the Registrant and Seikagaku Corporation dated December 27, 1994.
10.16(6)+	License Agreement between the Registrant and Seikagaku Corporation dated December 27, 1994.
10.17(6)+	Loan Agreement between the Registrant and Silicon Valley Bank and Venture Lending & Leasing, Inc., dated December 28, 1994.
10.20(6)	Security Agreement, dated December 28, 1994.
10.21(6)+	Patent Collateral Assignment, dated December 28, 1994.
10.22(6)+	Trademark Collateral Assignment, dated December 28, 1994.
10.23(6)	Intercreditor Agreement, dated December 28, 1994.
10.24(6)	Deed of Trust and Fixture Filing, dated December 28, 1994.
10.25(6)	Three-Party Leasehold Agreement, dated September 30, 1994.
10.26(6)	Warrants to Purchase Shares of Common Stock, dated December 30, 1994.
10.27(6)	1994 Registration Rights Agreement.
10.28(6)	Investment Agreement between the Registrant, SmithKline Beecham p.l.c. and SmithKline Beecham Corporation, dated December 28, 1994.
10.29(7)	Master Definitions Agreement between the Registrant and Genentech. Inc.
10.30(7)+	Collaboration Agreement between the Registrant and Genentech. Inc., dated March 16, 1995.
10.31(7)+	Expression Technology Agreement between the Registrant and Genentech. Inc., dated March 16, 1995.

EXHIBIT NUMBER	DESCRIPTION
10.32(7)	Preferred Stock Purchase Agreement between the Registrant and Genentech. Inc., dated March 16, 1995.
10.33(7)	Option Agreement between the Registrant and Genentech, Inc., dated March 16, 1995.
10.34(7)	Preferred and Common Stock Purchase Agreement between the Registrant and ML/ MS Associates, L.P., dated March 16, 1995.
10.35(9)+	Amendment Agreement between the Registrant and SmithKline Beecham p.l.c., dated January 20, 1993.
10.36(9)+	Modification of the Amendment Agreement between the Registrant and SmithKline Beecham p.l.c., dated June 14, 1993.
10.37(8)	Special Stock Issuance Plan.
10.38(10)	$2,500,000 Promissory Note, dated August 11, 1995.
10.39(10)	Warrants to purchase shares of common stock, dated August 9, 1995.
10.40(15)+	Collaborative Development Agreement between the Registrant and Eisai Co., Ltd. dated December 11, 1995.
10.41(15)+	License Agreement between the Registrant and Eisai Co., Ltd. dated December 11, 1995.
10.42(15)+	License Agreement between the Registrant, Genentech, Inc. and Zenyaku Kogyo Co., Ltd. dated November 30, 1995.
10.43(15)+	Development Agreement between the Registrant, Genentech, Inc. and Zenyaku Kogyo Co., Ltd. dated November 30, 1995.
10.44(15)+	Supply Agreement between the Registrant and Zenyaku Kogyo Co., Ltd. dated November 30, 1995.
10.45(15)+	Termination Agreement between the Registrant and Zenyaku Kogyo Co., Ltd. dated November 30, 1995.
10.46(15)+	Amendment to the Development Agreement between the Registrant, Genentech, Inc. and Zenyaku Kogyo Co., Ltd. dated November 30, 1995.
10.47(15)	Amendment to Collaboration Agreement between the Registrant and Genentech, Inc. dated November 30, 1995.
10.48(11)+	License Agreement between the Registrant and Chugai Pharmaceutical Co., Ltd., dated March 31, 1996.
10.49(14)	Lease Agreement between the Registrant and All Spectrum Services, Inc., dated August 13, 1996.
10.50(1)	Form of Indemnification Agreement for Officers and Directors.
10.51(16)+	9-AC Asset Transfer Agreement between the Registrant, Pharmacia & Upjohn S.p.A. and Pharmacia & Upjohn Company, dated February 10, 1997.
22.1(2)	Subsidiary of the Company.
23.0	Independent Auditors' Report on Schedule and Consent
23.1	Financial Statement Schedule
27.1	Financial Data Schedule

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+ Confidential Treatment has been granted with respect to portions of this agreement.

(1) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form 8-B filed on June 2, 1997.

(2) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-1, File No. 33-40756.

(3) Incorporated by reference to exhibit filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1992.

(4) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-1, File No. 33-76080.

(5) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-8, File No. 33-93794.

(6) Incorporated by reference to exhibit filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1994.

(7) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 1995.

(8) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-8, File No. 33-90738.

(9) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1995.

(10) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1995.

(11) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 1996.

(12) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form 8-K, dated May 21, 1996.

(13) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-8, File No. 333-2969.

(14) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996.

(15) Incorporated by reference to exhibit filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.

(16) Incorporated by reference to exhibit filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1997.

(17) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form S-8, File No. 333-62817.

(18) Incorporated by reference to exhibit filed with the Registrant's Registration Statement on Form 8-A, dated August 1, 1997.

b. No reports on Form 8-K were filed during the fourth quarter of 1997.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

IDEC PHARMACEUTICALS CORPORATION

Date: March 30, 1999 By: /s/ WILLIAM H. RASTETTER

William H. Rastetter, Ph.D.,
Chairman,
President and Chief Executive
Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint William H. Rastetter and Phillip M. Schneider, or either of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution, for him and his name, place and stead, in any and all capacities, to sign the Registration Statement filed herewith and any and all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462 and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, 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 purposes as he might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated.

Pursuant to the requirements the securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

NAME	CAPACITY	DATE
/s/ WILLIAM H. RASTETTER William H. Rastetter, Ph.D.	Chairman, President and Chief Executive Officer (Principal Executive Officer)	March 30, 1999
/s/ PHILLIP M. SCHNEIDER Phillip M. Schneider	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	March 30, 1999
/s/ CHARLES C. EDWARDS Charles C. Edwards, M.D.	Director	March 30, 1999
/s/ ALAN B. GLASSBERG Alan B. Glassberg, M.D.	Director	March 30, 1999
John Groom	Director	
Kazuhiro Hashimoto	Director	

NAME	CAPACITY	DATE
/s/ FRANKLIN P. JOHNSON Franklin P. Johnson, Jr.	Director	March 30, 1999
/s/ ROBERT W. PANGIA Robert W. Pangia	Director	March 30, 1999
/s/ BRUCE R. ROSS Bruce R. Ross	Director	March 30, 1999
/s/ THE HONORABLE LYNN SCHENK The Honorable Lynn Schenk	Director	March 30, 1999
/s/ WILLIAM D. YOUNG William D. Young	Director	March 30, 1999

EXHIBIT 1.1

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IDEC PHARMACEUTICALS CORPORATION
(a Delaware corporation)
ISSUER

$300,000,000
Liquid Yield Option Notes(TM) due 2019
(Zero Coupon -- Subordinated)

PURCHASE AGREEMENT

Dated: February 9, 1999

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(TM)Trademark of Merrill Lynch & Co., Inc.

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IDEC PHARMACEUTICALS CORPORATION
(a Delaware corporation)
ISSUER

$300,000,000
Liquid Yield Option Notes(TM) due 2019
(Zero Coupon -- Subordinated)

PURCHASE AGREEMENT

February 9, 1999

MERRILL LYNCH & CO.
Merrill Lynch, Pierce, Fenner & Smith Incorporated
North Tower
World Financial Center
New York, New York 10281-1209

Ladies and Gentlemen:

IDEC Pharmaceuticals Corporation, a Delaware corporation (the "Company"), confirms its agreement with Merrill Lynch & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "Initial Purchaser"), with respect to the issue and sale by the Company and the purchase by the Initial Purchaser of $300,000,000 aggregate principal amount at maturity of the Company's Liquid Yield Option Notes(TM) due 2019 (the "Initial Securities") and the grant by the Company to the Initial Purchaser of the option described in Section 2(b) to purchase all or any part of an additional $45,000,000 aggregate principal amount at maturity of the Company's Liquid Yield Option Notes(TM) due 2019 to cover over-allotments, if any (the "Option Securities"). The Initial Securities, together with the Option Securities, are collectively referred to herein as the "Securities". The Securities are to be issued pursuant to an indenture dated as of February 16, 1999 (the "Indenture") between the Company and Chase Manhattan Bank and Trust Company, N.A., as trustee (the "Trustee"). Securities issued in book-entry form will be issued to Cede & Co. as nominee of The Depository Trust Company ("DTC") pursuant to a letter agreement, to be dated as of the Closing Time (as defined in Section 2(b)) (the "DTC Agreement"), among the Company, the Trustee and DTC.

The Securities will be convertible into shares of common stock, par value $0.001 per share, of the Company (the "Common Stock") in accordance with the terms of the Securities and the Indenture, at the initial conversion rate specified in Schedule A hereto. Upon the fifth, tenth and

fifteenth anniversaries of the initial issuance date of the Securities, each holder of Securities may require the Company to purchase such Securities for a price to be paid, at the Company's option, in cash or (subject to certain limitations) shares of Common Stock, or any combination thereof, at a purchase price equal to the issue price of the Securities plus the accrued original issue discount thereon to the date of such purchase. If prior to such date of purchase the Securities have been converted to semiannual coupon notes following the occurrence of a Tax Event (as defined in the Indenture), such purchase price will be equal to the Restated Principal Amount (as defined in the Indenture) plus accrued and unpaid interest (in lieu of any original issue discount) from the date of such conversion through such date of purchase. Upon each Change in Control (as defined in the Indenture) occurring prior to the fifth anniversary of the initial issuance date of the Securities, each holder of Securities may require the Company to purchase for cash such holder's Securities (subject to certain restrictions described below) at a purchase price equal to the issue price of the Securities plus the accrued original issue discount thereon to the date of such purchase. If prior to such date of purchase the Securities have been converted to semiannual coupon notes following the occurrence of a Tax Event, the Company will be required to purchase such Securities at a cash price equal to the Restated Principal Amount plus accrued and unpaid interest (in lieu of any original issue discount) from the date of such conversion through such date of purchase.

The holders of Securities will be entitled to the benefits of a Registration Rights Agreement, substantially in the form attached hereto as Exhibit A with such changes as shall be agreed to by the parties hereto (the "Registration Rights Agreement"), pursuant to which the Company will file a registration statement with the Securities and Exchange Commission (the "Commission") registering resales of the Securities and the shares of Common Stock issuable upon conversion thereof, as referred to in the Registration Rights Agreement under the Securities Act of 1933, as amended (the "1933 Act").

The Company understands that the Initial Purchaser proposes to make an offering of the Securities on the terms and in the manner set forth herein and agrees that the Initial Purchaser may resell, subject to the conditions set forth herein, all or a portion of the Securities to purchasers ("Subsequent Purchasers") at any time after the date of this Agreement. The Securities are to be offered and sold through the Initial Purchaser without being registered under the 1933 Act, in reliance upon exemptions therefrom. Pursuant to the terms of the Securities and the Indenture, investors that acquire Securities may only resell or otherwise transfer such Securities if such Securities are hereafter registered under the 1933 Act or if an exemption from the registration requirements of the 1933 Act is available (including the exemption afforded by Rule 144A ("Rule 144A") or Regulation S ("Regulation S") of the rules and regulations promulgated under the 1933 Act (the "1933 Act Regulations") by the Commission).

The Company has prepared and delivered to the Initial Purchaser copies of a preliminary offering memorandum dated February 1, 1999 (the "Preliminary Offering Memorandum") and has prepared and will deliver to the Initial Purchaser on the date hereof or the next succeeding day, copies of a final offering memorandum dated February 9, 1999 (the "Final Offering

Memorandum") for use by the Initial Purchaser in connection with its solicitation of, purchases of, or offering of, the Securities. "Offering Memorandum" means, with respect to any date or time referred to in this Agreement, the most recent offering memorandum (whether the Preliminary Offering Memorandum or the Final Offering Memorandum, or any amendment or supplement to either such document), including exhibits and appendices thereto and any documents incorporated therein by reference, which has been prepared and delivered by the Company to the Initial Purchaser in connection with its solicitation of purchases of, or offering of, the Securities.

All references in this Agreement to financial statements and schedules and other information which is "contained", "included" or "stated" in the Offering Memorandum (or other references of like import) shall be deemed to mean and include all such financial statements and schedules and other information which are incorporated by reference in the Offering Memorandum; and all references in this Agreement to amendments or supplements to the Offering Memorandum shall be deemed to mean and include the filing of any document under the Securities Exchange Act of 1934 (the "1934 Act") which is incorporated by reference in the Offering Memorandum.

SECTION 1. Representations and Warranties by the Company.

(a) Representations and Warranties. The Company represents and warrants to the Initial Purchaser as of the date hereof and as of the Closing Time referred to in Section 2(c) hereof, and as of the Date of Delivery (if any) referred to in Section 2(b) hereof, and agrees with the Initial Purchaser, as follows:

(i) Similar Offerings. Neither the Company nor any of its affiliates, as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate"), has, directly or indirectly, solicited any offer to buy, sold or offered to sell or otherwise negotiated in respect of, or will solicit any offer to buy or offer to sell or otherwise negotiate in respect of, in the United States or to any United States citizen or resident, any security which is or would be integrated with the sale of the Securities in a manner that would require the Securities to be registered under the 1933 Act.

(ii) Offering Memorandum. The Offering Memorandum does not, and at the Closing Time (as defined herein) (and, if any Option Securities are purchased, at the Date of Delivery (as defined herein)) will not, include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that this representation, warranty and agreement shall not apply to statements in or omissions from the Offering Memorandum made in reliance upon and in conformity with information furnished to the Company in writing by the Initial Purchaser expressly for use in the Offering Memorandum.

(iii) Incorporated Documents. The Offering Memorandum as delivered from time to time shall incorporate by reference the most recent Annual Report of the Company on Form 10-K, each Quarterly Report of the Company on Form 10-Q and each Current Report of the Company on Form 8-K filed with the Commission since the filing of such Annual Report. The documents incorporated or deemed to be incorporated by reference in the Offering Memorandum at the time they were or hereafter are filed with the Commission complied and will comply in all material respects with the requirements of the 1934 Act and the rules and regulations of the Commission thereunder (the "1934 Act Regulations"), and, when read together with the other information in the Offering Memorandum, at the date of the Offering Memorandum and at the Closing Time (and, if any Option Securities are purchased, at the Date of Delivery), do not and will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(iv) Independent Accountants. KPMG LLP ("KPMG"), the accountants who certified the financial statements and supporting schedules with respect to the Company included in the Offering Memorandum are independent public accountants with respect to the Company and its subsidiaries within the meaning of Regulation S-X under the 1933 Act.

(v) Financial Statements. The financial statements, together with the related schedules and notes, included in the Offering Memorandum present fairly the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; said financial statements have been prepared in conformity with generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved. The supporting schedules, if any, included in the Offering Memorandum present fairly in accordance with GAAP the information required to be stated therein. The selected financial data included in the Offering Memorandum present fairly the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included in the Offering Memorandum.

(vi) No Material Adverse Change in Business. Since the respective dates as of which information is given in the Offering Memorandum, except as otherwise stated therein, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered

as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(vii) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and corporate authority to own, lease and operate its properties and to conduct its business as described in the Offering Memorandum and to enter into and perform its obligations under this Agreement, the Indenture and the Registration Rights Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(viii) Good Standing of the Subsidiary. IDEC Seigaku (the "Subsidiary") has been duly organized, is validly existing and is in good standing under the laws of the jurisdiction of its incorporation with corporate power and corporate authority to own, lease and operate its properties and to conduct its business as described in the Offering Memorandum and is duly qualified to transact business as a foreign corporation and is in good standing in each other jurisdiction in which it owns or leases property of a nature or transacts business of a type, that would make such qualification necessary, except to the extent that the failure to so qualify or be in good standing would not have a Material Adverse Effect; all of the issued and outstanding capital stock of the Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is wholly owned by the Company, directly free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity; none of the outstanding shares of capital stock of the Subsidiary was issued in violation of any preemptive or similar rights of any securityholder of the Subsidiary. The Subsidiary is the only subsidiary of the Company as of the date hereof.

(ix) Capitalization. The authorized, issued and outstanding capital stock and the debt of the Company is as set forth in the Offering Memorandum in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements, employee benefit plans referred to in the Offering Memorandum or pursuant to the exercise of convertible securities or options referred to in the Offering Memorandum). The shares of issued and outstanding capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable; none of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company. The authorized capital stock of the Company conforms in all material respects as to legal matters to the description thereof contained in the Offering Memorandum.

Upon issuance and delivery of the Securities in accordance with this Agreement and the Indenture, the Securities will be convertible at the option of the holder thereof into shares of Common Stock, subject to the Company's right to elect instead to pay such holder in cash the market value of such shares of Common Stock, in accordance with the terms of the Securities and the Indenture; the shares of Common Stock issuable upon such conversion of the Securities have been duly authorized and reserved for issuance upon such conversion by all necessary corporate action and such shares, when issued upon such conversion, will be validly issued and will be fully paid and non-assessable; the shares of Common Stock issuable at the Company's option upon purchase of the Securities at the option of the holder thereof will have been, prior to the issuance thereof, duly authorized by all necessary corporate action, and such shares if and when issued, in accordance with the terms of the Securities and the Indenture, will be validly issued, fully paid and non-assessable; and the issuance of such shares upon such conversion or purchases will not be subject to the preemptive or other similar rights of any securityholder of the Company.

(x) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(xi) Authorization of the Indenture. The Indenture has been duly authorized by the Company and, when executed and delivered by the Company and the Trustee, will constitute a valid and binding agreement of the Company, enforceable against the Company in accordance with its terms, except as enforceability thereof may be limited by bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally and by equitable principles of general applicability, regardless of whether such enforceability is considered in a proceeding at equity or at law.

(xii) Authorization of the Registration Rights Agreement. The Registration Rights Agreement has been duly authorized by the Company and, when executed and delivered by the Company and the Initial Purchaser, will constitute a valid and binding agreement of the Company, enforceable against the Company in accordance with its terms, except as enforceability thereof may be limited by bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally and by equitable principles of general applicability, regardless of whether such enforceability is considered in a proceeding at equity or at law.

(xiii) Authorization of the Securities. The Securities have been duly authorized by the Company and, at the Closing Time, will have been duly executed by the Company and, when authenticated, issued and delivered in the manner provided for in the Indenture and delivered against payment of the purchase price therefor as provided in this

Agreement, will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforceability thereof may be limited by bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally and by equitable principles of general applicability, regardless of whether such enforceability is considered in a proceeding at equity or at law, and will be in the form contemplated by, and entitled to the benefits of, the Indenture and the Registration Rights Agreement.

(xiv) Description of the Securities, the Indenture and the Registration Rights Agreement. The Securities, the Indenture and the Registration Rights Agreement will conform in all material respects to the respective statements relating thereto contained in the Offering Memorandum and will be in substantially the respective forms last delivered to the Initial Purchaser prior to the date of this Agreement.

(xv) Absence of Defaults and Conflicts. Except as disclosed in the Offering Memorandum, neither the Company nor any of its subsidiaries is in violation of its charter, by-laws or other organizational documents or in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it may be bound or to which any of the property or assets of the Company or any of its subsidiaries may be subject (collectively, "Agreements and Instruments"), except for such violations or defaults that would not result in a Material Adverse Effect; and the execution, delivery and performance of this Agreement, the Indenture, the Registration Rights Agreement and the Securities and any other agreement or instrument entered into or issued or to be entered into or issued by the Company in connection with the transactions contemplated hereby or thereby or in the Offering Memorandum and the consummation of the transactions contemplated herein and in the Offering Memorandum (including, without limitation, the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described in the Offering Memorandum under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or a Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, the Agreements and Instruments except for such conflicts, breaches or defaults or liens, charges or encumbrances that, singularly or in the aggregate, would not result in a Material Adverse Effect, nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any of its subsidiaries or any applicable law, statute, rule, regulation, judgment, order, writ or decree of any government, government instrumentality or court, domestic or foreign, having jurisdiction over the Company or

any of its subsidiaries or any of their assets or properties. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(xvi) Absence of Labor Dispute. No labor dispute exists with the employees of the Company or with employees of any of its subsidiaries nor, to the knowledge of the Company, is any such labor dispute imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any of its subsidiaries' principal suppliers, manufacturers, customers, contractors, or collaborative business partners, including Genentech, Inc. and F. Hoffman-LaRoche, Inc., which, in either case, may reasonably be expected to result in a Material Adverse Effect.

(xvii) Absence of Proceedings. Except as disclosed in the Offering Memorandum, there is no action, suit, proceeding (except applications for regulatory approval from the Food and Drug Administration and foreign drug agencies), inquiry or investigation before or by any government, governmental instrumentality or court, domestic or foreign, now pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its subsidiaries, as the case may be, that could reasonably be expected to have a Material Adverse Effect, or that could reasonably be expected individually or in the aggregate to materially and adversely affect the properties or assets of the Company or any of its subsidiaries, considered as one enterprise, or that could reasonably be expected to adversely affect the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder. The aggregate of all pending legal or governmental proceedings to which the Company or any of its subsidiaries is a party or which affect any of its properties that are not described in the Offering Memorandum, including ordinary routine litigation incidental to the business, could not reasonably be expected to have a Material Adverse Effect.

(xviii) Possession of Intellectual Property. Except as disclosed in the Offering Memorandum, the Company and its subsidiaries own or possess, or can acquire on reasonable terms, adequate patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) trademarks, service marks, trade names or other intellectual property (collectively, "Intellectual Property") necessary to carry on the business now operated by them, and neither the Company nor any of its subsidiaries has received any notice or is otherwise aware of any infringement of or conflict with asserted rights of others with respect to any Intellectual Property or of any facts or circumstances which would render any Intellectual Property invalid or inadequate to protect the interest of the Company or any of its subsidiaries therein, and which infringement or conflict (if the subject of any unfavorable decision, ruling or finding) or

invalidity or inadequacy, singularly or in the aggregate, would result in a Material Adverse Effect.

(xix) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any court or governmental authority or agency is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement or for the due execution, delivery or performance of the Indenture by the Company, except such as have been already obtained.

(xx) Possession of Licenses and Permits. Except as disclosed in the Offering Memorandum, the Company and its subsidiaries possess such licenses, approvals, consents and other authorizations (collectively, the "Governmental Licenses") issued by the appropriate federal, state, local or foreign regulatory agencies or bodies necessary to conduct the business now operated by them; the Company and its subsidiaries are in compliance with the terms and conditions of all such Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, have a Material Adverse Effect; all of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not have a Material Adverse Effect; and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.

(xxi) Title to Property. The Company and its subsidiaries have good and marketable title to all properties and assets owned by each of them, free and clear of all mortgages, pledges, liens, charges, security interests, claims, encumbrances or restrictions of any kind, except such as (A) are disclosed in the Offering Memorandum or (B) are neither material in amount nor materially significant in relation to the business of the Company and its subsidiaries, considered as one enterprise; all of the leases and subleases material to the business of the Company and its subsidiaries, considered as one enterprise, and under which the Company or any of its subsidiaries holds properties described in the Offering Memorandum, are in full force and effect, and neither the Company nor any of its subsidiaries has any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any of its subsidiaries under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or any subsidiary thereof to the continued possession of the leased or subleased premises under any such lease or sublease.

(xxii) Environmental Laws. Except as disclosed in the Offering Memorandum and except as such matters would not, singularly or in the aggregate, have a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, except where the failure so to be in compliance would not result in a Material Adverse Effect, (C) there are no pending or, to the best knowledge of the Company, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (D), to the best knowledge of the Company, there are no events or circumstances that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(xxiii) Rule 144A Eligibility. The Securities are eligible for resale pursuant to Rule 144A and will not be, at the Closing Time, of the same class as securities listed on a national securities exchange registered under Section 6 of the 1934 Act, or quoted in a U.S. automated interdealer quotation system.

(xxiv) No General Solicitation. None of the Company, its Affiliates or any person acting on its or any of their behalf (other than the Initial Purchaser and its Affiliates, as to whom the Company makes no representation) has engaged or will engage, in connection with the offering of the Securities, in any form of general solicitation or general advertising within the meaning of Rule 502(c) under the 1933 Act.

(xxv) No Registration Required. Subject to compliance by the Initial Purchaser with the representations and warranties set forth in Section 2 and the procedures set forth in Section 6 hereof, it is not necessary in connection with the offer, sale and delivery of the Securities to the Initial Purchaser and to each Subsequent Purchaser in the manner contemplated by this Agreement and the Offering Memorandum

to register the Securities under the 1933 Act or to qualify the Indenture under the Trust Indenture Act of 1939, as amended (the "1939 Act").

(xxvi) Investment Company Act. The Company is not, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Offering Memorandum will not be, an "investment company" or an entity "controlled" by an "investment company" as such terms are defined in the Investment Company Act of 1940, as amended (the "1940 Act").

(xxvii) Filing of Tax Returns. The Company and each of its subsidiaries have filed all tax returns which are required to have been filed by them pursuant to domestic or foreign laws and have paid all taxes due pursuant to such returns or pursuant to any assessment received by them (except where the requirement for payment of such taxes is being contested in good faith in appropriate proceedings), except where the failure so to file or pay would not result in a Material Adverse Effect. The charges, accruals and reserves on the books of the Company and its subsidiaries in respect of taxes or other governmental charges are, to the best knowledge of the Company after reasonable investigation, adequate.

(xxviii) Insurance. The Company and the Subsidiary are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which they are engaged; neither the Company nor the Subsidiary has been refused any material insurance coverage sought or applied for that has not subsequently been approved by an insurance company with sound financial resources; and neither the Company nor the Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not materially and adversely affect the condition, financial or otherwise, or the earnings, business or operations of the Company and the Subsidiary, taken as a whole.

(xxix) Interests in Corporation, Partnership or Joint Ventures. The Company does not own any equity or capital interests in any corporation, partnership, joint venture, association or other entity, other than the Subsidiary.

(xxx) System of Internal Accounting Controls. The Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization, (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets, (C) access to assets is permitted only in accordance with management's general or specific authorization and (D) the recorded accountability

for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(xxxi) Solvency. The Company is, and immediately after the Closing Time or the Date of Delivery, as the case may be, will be, Solvent. As used herein, the term "Solvent" means, with respect to the Company on a particular date, that on such date (A) the fair market value of the assets of the Company is greater than the total amount of liabilities (including contingent liabilities) of the Company, (B) the present fair salable value of the assets of the Company is greater than the amount that will be required to pay the probable liabilities of the Company on its debts as they become absolute and matured, (C) the company is able to realize upon its assets and pay its debts and other liabilities, including contingent obligations, as they mature, and (D) the Company does not have unreasonably small capital in relation to its business and operations.

(xxxii) Default Under Senior Indebtedness. No event of default exists under any contract, indenture, mortgage, loan agreement, note, lease or other agreement or instrument constituting Senior Indebtedness (as defined in the Indenture).

(b) Officer's Certificates. Any certificate signed by any officer of the Company or any of its subsidiaries delivered to the Initial Purchaser or to counsel for the Initial Purchaser shall be deemed a representation and warranty by the Company to the Initial Purchaser as to the matters covered thereby.

SECTION 2. Sale and Delivery to Initial Purchaser; Closing.

(a) Initial Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to the Initial Purchaser, and the Initial Purchaser agrees to purchase from the Company, at the price set forth in Schedule A hereto, the Initial Securities.

(b) Option Securities. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Initial Purchaser to purchase any or all of the Option Securities (in multiples of $1,000 principal amount at maturity) at the price set forth in Schedule A hereto plus accrued Original Issue Discount, if any, from the Closing Time to the Date of Delivery. The option hereby granted will expire 30 days after the date hereof and may be exercised in whole or in part from time to time only for the purpose of covering over-allotments that may be made in connection with the offering and distribution of the Initial Securities upon notice by the Initial Purchaser to the Company setting forth the number of Option Securities as to which the Initial Purchaser is then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Initial Purchaser, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time, as hereinafter defined.

(c) Payment. Payment of the purchase price for, and delivery of certificates for, the Initial Securities shall be made at the office of Brobeck, Phleger & Harrison, LLP, Two Embarcadero Place, 2200 Geng Road, Palo Alto, CA, or at such other place as shall be agreed upon by the Initial Purchaser and the Company, at 9:00 A.M. (eastern time) on February 16, 1999, or such other time not later than ten business days after such date as shall be agreed upon by the Initial Purchaser and the Company (such time and date of payment and delivery being herein called the "Closing Time").

In addition, in the event that any or all of the Option Securities are purchased by the Initial Purchaser, payment of the purchase price for, and delivery of certificates for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Initial Purchaser and the Company, on each Date of Delivery as specified in the notice from the Initial Purchaser to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company in writing, against delivery to the Initial Purchaser for its account of certificates for the Securities to be purchased by it.

(d) Qualified Institutional Buyer. The Initial Purchaser represents and warrants to, and agrees with, the Company that it is a "qualified institutional buyer" within the meaning of Rule 144A under the 1933 Act (a "Qualified Institutional Buyer") and an "accredited investor" within the meaning of Rule 501(a) under the 1933 Act (an "Accredited Investor").

(e) Denominations; Registration. Certificates for the Securities shall be in such denominations ($1,000 or integral multiples thereof) and registered in such names as the Initial Purchaser may request in writing at least one full business day before the Closing Time or the relevant Date of Delivery, as the case may be. The certificates representing the Securities shall be registered in the name of Cede & Co. pursuant to the DTC Agreement and shall be made available for examination and packaging by the Initial Purchaser in The City of New York not later than 10:00 A.M. on the last business day prior to the Closing Time or the relevant Date of Delivery, as the case may be.

SECTION 3. Covenants of the Company. The Company covenants with the Initial Purchaser as follows:

(a) Offering Memorandum. The Company, as promptly as possible, will furnish to the Initial Purchaser, without charge, such number of copies of the Preliminary Offering Memorandum, Final Offering Memorandum and any amendments and supplements thereto and documents incorporated by reference therein as the Initial Purchaser may reasonably request.

(b) Notice and Effect of Material Events. The Company will immediately notify the Initial Purchaser, and confirm such notice in writing, of (x) any filing made by the Company of information relating to the offering of the Securities with any securities exchange or any other

regulatory body in the United States or any other jurisdiction, and (y) prior to the completion of the placement of the Securities by the Initial Purchaser as evidenced by a notice in writing from the Initial Purchaser to the Company, any material changes in or affecting the condition, financial or otherwise, or the earnings, business affairs or business prospects of the Company and its subsidiaries, considered as one enterprise, of which the Company becomes aware of after reasonable investigation, which (i) make any statement in the Offering Memorandum false or misleading or (ii) are not disclosed in the Offering Memorandum. In such event or if during such time any event shall occur as a result of which it is necessary, in the reasonable opinion of any of the Company, its counsel, the Initial Purchaser or counsel for the Initial Purchaser, to amend or supplement the Final Offering Memorandum in order that the Final Offering Memorandum not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances then existing, the Company will forthwith amend or supplement the Final Offering Memorandum by preparing and furnishing to the Initial Purchaser an amendment or amendments of, or a supplement or supplements to, the Final Offering Memorandum (in form and substance satisfactory in the reasonable opinion of counsel for the Initial Purchaser) so that, as so amended or supplemented, the Final Offering Memorandum will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time it is delivered to a Subsequent Purchaser, not misleading.

(c) Amendment to Offering Memorandum and Supplements. The Company will advise the Initial Purchaser promptly of any proposal to amend or supplement the Offering Memorandum and will not effect such amendment or supplement without the consent of the Initial Purchaser. Neither the consent of the Initial Purchaser, nor the Initial Purchaser's delivery of any such amendment or supplement, shall constitute a waiver of any of the conditions set forth in Section 5 hereof.

(d) Qualification of Securities for Offer and Sale. The Company will use its reasonable best efforts, in cooperation with the Initial Purchaser, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions as the Initial Purchaser may designate and will maintain such qualifications in effect as long as required for the sale of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(e) DTC. The Company will cooperate with the Initial Purchaser and use its reasonable best efforts to permit the Securities to be eligible for clearance and settlement through the facilities of DTC.

(f) Use of Proceeds. The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Offering Memorandum under "Use of Proceeds".

(g) Restriction on Sale of Securities. During a period of 90 days from the date of the Offering Memorandum, the Company will not, without the prior written consent of Merrill Lynch, directly or indirectly, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, or otherwise dispose of or transfer any shares of the Company's Common Stock or any securities convertible into or exchangeable or exercisable for Common Stock, whether now owned or hereafter acquired by the Company or with respect to which the Company has or hereafter acquires the power of disposition, or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of Common Stock or any securities convertible into or exchangeable for Common Stock, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or upon the conversion of a security outstanding on the date hereof and referred to in the Offering Memorandum or the conversion of the Securities or (C) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company.

(h) PORTAL Designation. The Company will use its best efforts to permit the Securities to be designated PORTAL securities in accordance with the rules and regulations adopted by the National Association of Securities Dealers, Inc. ("NASD") relating to trading in the PORTAL Market.

(i) Reservation of Common Stock. The Company will reserve and keep available at all times, free of preemptive rights, Common Stock for the purpose of enabling the Company to satisfy any obligations to issue Common Stock upon conversion of the Securities.

(j) Listing of Common Stock. The Company will use its best efforts to cause all shares of Common Stock issuable upon conversion of the Securities to be listed on the Nasdaq National Market.

SECTION 4. Payment of Expenses.

(a) Expenses. The Company agrees to bear all expenses incident to the performance of its obligations under this Agreement, the Securities, the Indenture and the Registration Rights Agreement, including, but not limited to, (i) the preparation and printing of the Offering Memorandum (including financial statements and any schedules or exhibits and any document incorporated therein by reference) and of each amendment or supplement thereto, (ii) the preparation, printing and delivery to the Initial Purchaser of this Agreement, the Indenture, the Registration Rights Agreement and such other documents as may be required in connection with the offering, purchase, sale, issuance or delivery of the Securities, (iii) the preparation, issuance and delivery of the certificates for the Securities to the Initial Purchaser, including any charges of

DTC in connection therewith, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(d) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Initial Purchaser in connection therewith and in connection with the preparation of the Blue Sky Survey, any supplement thereto and any Legal Investment Survey, (vi) the fees and expenses of the Trustee, including the reasonable fees and disbursements of counsel for the Trustee in connection with the Indenture and the Securities, (vii) any fees payable in connection with the rating of the Securities and (viii) any fees and expenses payable in connection with the initial and continued designation of the Securities as PORTAL securities under the PORTAL Market Rules pursuant to NASD Rule 5322.

(b) Termination of Agreement. If this Agreement is terminated by the Initial Purchaser in accordance with the provisions of Section 5 or Section 10(a)(i) hereof, the Company shall reimburse the Initial Purchaser for all of its out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Initial Purchaser.

SECTION 5. Conditions of Initial Purchaser's Obligations. The obligations of the Initial Purchaser hereunder are subject to the accuracy of the representations and warranties of the Company contained in Section 1 hereof or in certificates of any officer of the Company or any of its subsidiaries delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

(a) Opinion of Counsel for the Company. At the Closing Time, the Initial Purchaser shall have received the opinion, dated as of the Closing Time, of Brobeck, Phleger & Harrison, LLP, counsel for the Company, in form and substance reasonably satisfactory to counsel for the Initial Purchaser, to the effect set forth in Exhibit B hereto.

(b) Opinion of Regulatory Affairs Counsel for the Company. At the Closing Time, the Initial Purchaser shall have received the opinion, dated as of the Closing Time, of Buc & Beardsley, special regulatory affairs counsel for the Company, in form and substance reasonably satisfactory to counsel for the Initial Purchaser, to the effect set forth in Exhibit C hereto and to such further effect as counsel to the Initial Purchaser may reasonably request.

(c) Opinion of Intellectual Property Counsel for the Company. At the Closing Time, the Initial Purchaser shall have received the opinion, dated as of the Closing Time, of Burns, Doane, Sweeker & Mathis, L.L.P., intellectual property counsel for the Company, in form and substance reasonably satisfactory to counsel for the Initial Purchaser, to the effect set forth in Exhibit D hereto and to such further effect as counsel to the Initial Purchaser may reasonably request.

(d) Opinion of Counsel for Initial Purchaser. At the Closing Time, the Initial Purchaser shall have received the opinion, dated as of the Closing Time, of Shearman & Sterling,

counsel for the Initial Purchaser, in form and substance reasonably satisfactory to the Initial Purchaser. In giving such opinion such counsel may rely, as to all matters governed by the laws of jurisdictions other than the law of the State of New York, the federal law of the United States and the General Corporation Law of the State of Delaware, upon the opinions of counsel satisfactory to the Initial Purchaser. Such counsel may also state that, insofar as such opinion involves factual matters, they have relied, to the extent they deem proper, upon certificates of officers of the Company and its subsidiaries and certificates of public officials.

(e) Officers' Certificates. At the Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Offering Memorandum, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, and the Initial Purchaser shall have received a certificate of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company, dated as of the Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties in Section 1 hereof are true and correct with the same force and effect as though expressly made at and as of the Closing Time, and (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time.

(f) Accountants' Comfort Letters. At the time of the execution of this Agreement, the Initial Purchaser shall have received from KPMG, a letter dated such date, in form and substance reasonably satisfactory to the Initial Purchaser, containing statements and information of the type ordinarily included in accountants' "comfort letters" to Initial Purchaser with respect to the financial statements and certain financial information contained in the Offering Memorandum.

(g) Bring-down Comfort Letter. At the Closing Time, the Initial Purchaser shall have received from KPMG a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Time.

(h) Rating. Since the date of this Agreement, there shall not have occurred a downgrading in the rating, if any, assigned to the Securities or any of the Company's other debt securities by any "nationally recognized statistical rating agency", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the 1933 Act, and no such securities rating agency shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of the Securities or any of the Company's other debt securities.

(i) Registration Rights Agreement. At the Closing Time, the Registration Rights Agreement, in form and substance reasonably satisfactory to the Initial Purchaser, shall have

been duly executed and delivered by the Company and (assuming due execution, delivery and performance by the Initial Purchaser) be in full force and effect.

(j) PORTAL. At the Closing Time, the Securities shall have been designated for trading on PORTAL.

(k) Lock-up Agreements. At the date of this Agreement, the Initial Purchaser shall have received an agreement substantially in the form of Exhibit E hereto signed by the persons listed on Schedule B hereto.

(l) Consents. The Initial Purchaser shall have received (A) a consent of all of the Lenders under the Loan Agreement dated as of December 28, 1994 among the Company, Silicon Valley Bank, as collateral agent, and the Lenders signatory thereto consenting to the Company's issuance of the Securities and (B) a consent of Genentech, Inc. waiving any rights it has to register with the Commission pursuant to the Registration Rights Agreement any securities of the Company it owns.

(m) Conditions to Purchase of Option Securities. In the event that the Initial Purchaser exercises its option provided in Section 2(b) to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company and any subsidiary of the Company hereunder shall be true and correct as of the Date of Delivery and, at the Date of Delivery, the Initial Purchaser shall have received:

(i) Officers' Certificates. Certificates, dated the Date of Delivery, of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(e) remains true and correct as of the Date of Delivery.

(ii) Opinions of Counsel. The opinions of Brobeck, Phleger & Harrison, LLP, counsel for the Company, Buc & Beardsley, special regulatory affairs counsel for the Company, and Burns, Doane, Sweeker & Mathis, L.L.P., intellectual property counsel for the Company, each in form and substance reasonably satisfactory to counsel for the Initial Purchaser, dated the Date of Delivery, relating to the Option Securities to be purchased on the Date of Delivery and otherwise to substantially the same effect as the opinions provided in Sections 5(a), 5(b) and 5(c).

(iii) Opinion of Counsel for the Initial Purchaser. The opinion of Shearman & Sterling, counsel for the Initial Purchaser, dated the Date of Delivery, relating to the Option Securities to be purchased on the Date of Delivery and otherwise to the same effect as the opinion provided in Section 5(d).

(iv) Bring-down Comfort Letters. Letter from KPMG in form and substance reasonably satisfactory to the Initial Purchaser and dated the Date of Delivery, substantially in the same form and substance as the letters furnished to the Initial Purchaser pursuant to Section 5(f), except that the "specified date" in the letters furnished pursuant to this paragraph shall be a date not more than three business days prior to the Date of Delivery.

(n) Additional Documents. At the Closing Time and at each Date of Delivery, counsel for the Initial Purchaser shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Initial Purchaser and counsel for the Initial Purchaser.

(o) Termination of Agreement. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the Initial Purchaser to purchase the Option Securities, may be terminated by the Initial Purchaser by notice to the Company at any time at or prior to the Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 7, 8 and 9 shall survive any such termination and remain in full force and effect.

SECTION 6. Subsequent Offers and Resales of the Securities.

(a) Offer and Sale Procedures. The Initial Purchaser and the Company hereby establish and agree to observe the following procedures in connection with the offer and sale of the Securities:

(i) Offers and Sales Only to Institutional Accredited Investors or Qualified Institutional Buyers. Offers and sales of the Securities shall only be made (A) to persons whom the offeror or seller reasonably believes to be qualified institutional buyers (as defined in Rule 144A under the Securities Act), or (B) to a limited number of other institutional accredited investors (as such term is defined in Rule 501(a)(1), (2), (3) or (7) of Regulation D) that the offeror or seller reasonably believes to be and, with respect to sales and deliveries, that are Accredited Investors ("Institutional Accredited Investors").

(ii) No General Solicitation. No general solicitation or general advertising (within the meaning of Rule 502(c) under the 1933 Act) will be used in the United States in connection with the offering or sale of the Securities.

(iii) Purchases by Non-Bank Fiduciaries. In the case of a non-bank Subsequent Purchaser of a Security acting as a fiduciary for one or more third parties, each third party shall, in the judgment of the applicable Initial Purchaser, be an Institutional Accredited Investor or a Qualified Institutional Buyer.

(iv) Subsequent Purchaser Notification. The Initial Purchaser will take reasonable steps to inform, and cause each of its U.S. Affiliates to take reasonable steps to inform, persons acquiring Securities from the Initial Purchaser or affiliate, as the case may be, in the United States that the Securities (A) have not been and will not be registered under the 1933 Act, (B) are being sold to them without registration under the 1933 Act in reliance on Rule 144A or in accordance with another exemption from registration under the 1933 Act, as the case may be, and (C) may not be offered, sold or otherwise transferred except (1) to the Company, (2) inside the United States in accordance with (x) Rule 144A to a person whom the seller reasonably believes is a Qualified Institutional Buyer that is purchasing such Securities for its own account or for the account of a Qualified Institutional Buyer to whom notice is given that the offer, sale or transfer is being made in reliance on Rule 144A, or (3) outside the United States in accordance with Regulation S or (y) pursuant to another available exemption from registration under the 1933 Act.

(v) Minimum Principal Amount. No sale of the Securities to any one Subsequent Purchaser will be for less than $250,000 principal amount at maturity and no Security will be issued in a smaller principal amount. If the Subsequent Purchaser is a non-bank fiduciary acting on behalf of others, each person for whom it is acting must purchase at least $250,000 principal amount at maturity of the Securities.

(vi) Restrictions on Transfer. The transfer restrictions and the other provisions set forth in the Offering Memorandum under the heading "Transfer Restrictions", including the legend required thereby, shall apply to the Securities except as otherwise agreed by the Company and the Initial Purchaser.

(b) Covenants of the Company. The Company covenants with the Initial Purchaser as follows:

(i) Integration. The Company agrees that it will not and will cause its Affiliates not to solicit any offer to buy or make any offer or sale of, or otherwise negotiate in respect of, securities of the Company of any class if, as a result of the doctrine of "integration" referred to in Rule 502 under the 1933 Act, such offer or sale would render invalid (for the purpose of (i) the sale of the Securities by the Company to the Initial Purchaser, (ii) the resale of the Securities by the Initial Purchaser to Subsequent Purchasers or (iii) the resale of the Securities by such Subsequent Purchasers to others) the exemption from the registration requirements of the 1933 Act provided by Section 4(2) thereof or by Rule 144A thereunder or otherwise.

(ii) Rule 144A Information. The Company agrees that, in order to render the Securities eligible for resale pursuant to Rule 144A under the 1933 Act, while any of the Securities remain outstanding, it will make available, upon request, to any holder of Securities or prospective purchasers of Securities the information specified in Rule 144A(d)(4), unless the Company furnishes information to the Commission pursuant to Section 13 or 15(d) of the 1934 Act (such information, whether made available to holders or prospective purchasers or furnished to the Commission, is herein referred to as "Additional Information").

(iii) Restriction on Repurchases. Until the expiration of two years after the original issuance of the Securities, the Company will not, and will cause its Affiliates not to, purchase or agree to purchase or otherwise acquire any Securities which are "restricted securities" (as such term is defined under Rule 144(a)(3) under the 1933 Act), whether as beneficial owner or otherwise (except as agent acting as a securities broker on behalf of and for the account of customers in the ordinary course of business in unsolicited broker's transactions).

SECTION 7. Indemnification.

(a) Indemnification of Initial Purchaser. The Company agrees to indemnify and hold harmless the Initial Purchaser and each person, if any, who controls the Initial Purchaser within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Offering Memorandum or the Final Offering Memorandum (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 7(d) below) any such settlement is effected with the written consent of the Company; and

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel chosen by the Initial Purchaser), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue

statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with written information furnished to the Company by the Initial Purchaser expressly for use in the Offering Memorandum (or any amendment thereto).

(b) Indemnification of Company, Directors and Officers. The Initial Purchaser agrees to indemnify and hold harmless the Company and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Offering Memorandum in reliance upon and in conformity with written information furnished to the Company by the Initial Purchaser expressly for use in the Offering Memorandum.

(c) Actions Against Parties; Notification. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 7(a) above, counsel to the indemnified parties shall be selected by the Initial Purchaser, and, in the case of parties indemnified pursuant to Section 7(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section or Section 8 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) Settlement Without Consent if Failure to Reimburse. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 7(a)(ii) effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 20 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

SECTION 8. Contribution. If the indemnification provided for in Section 7 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Initial Purchaser on the other hand from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and of the Initial Purchaser on the other hand in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company on the one hand and the Initial Purchaser on the other hand in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses) received by the Company and the total underwriting discount received by the Initial Purchaser, bear to the aggregate initial offering price of the Securities.

The relative fault of the Company on the one hand and the Initial Purchaser on the other hand shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Initial Purchaser and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Initial Purchaser agree that it would not be just and equitable if contribution pursuant to this Section were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating,

preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section, the Initial Purchaser shall not be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which the Initial Purchaser has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section, each person, if any, who controls the Initial Purchaser within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Initial Purchaser, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company.

SECTION 9. Representations, Warranties and Agreements to Survive Delivery. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of the Initial Purchaser or controlling person, or by or on behalf of the Company, and shall survive delivery of the Securities to the Initial Purchaser.

SECTION 10. Termination of Agreement.

(a) Termination; General. The Initial Purchaser may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (i) if there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Offering Memorandum, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Initial Purchaser, impracticable to market the Securities or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission, or if trading generally on the American Stock Exchange or the New York Stock Exchange or in the Nasdaq

National Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by such system or by order of the Commission, the National Association of Securities Dealers, Inc. or any other governmental authority or (iv) if a banking moratorium has been declared by either Federal or New York authorities.

(b) Liabilities. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 7, 8 and 9 shall survive such termination and remain in full force and effect.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Initial Purchaser shall be directed to it at 3300 Hillview Avenue, Suite 150, Palo Alto, California 94304, attention of D. Casey Safreno; notices to the Company shall be directed to it at 11011 Torreyana Road, San Diego, California 92121, attention of Ken Woolcott.

SECTION 12. Parties. This Agreement shall inure to the benefit of and be binding upon the Initial Purchaser and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Initial Purchaser and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 7 and 8 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Initial Purchaser and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from the Initial Purchaser shall be deemed to be a successor by reason merely of such purchase.

SECTION 13. GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK. SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 14. Effect of Headings. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement between the Initial Purchaser and the Company in accordance with its terms.

Very truly yours,

IDEC PHARMACEUTICALS CORPORATION

By /s/ Phillip M. Schneider

Title: Vice President and Chief Financial Officer

CONFIRMED AND ACCEPTED,
as of the date first above written:

MERRILL LYNCH, PIERCE, FENNER & SMITH
INCORPORATED

By /s/Mark J. Robinson

Authorized Signatory

SCHEDULE A

IDEC PHARMACEUTICALS CORPORATION
$300,000,000 Liquid Yield Option Notes(TM) due 2019

1. The initial public offering price per $1,000 principal amount at maturity of the Securities shall be $337.85, which represents a yield to maturity of 5.5% per annum (computed on a semiannual bond equivalent basis).

2. The Securities shall be convertible into shares of common stock, par value $0.001 per share, of the Company (the "Common Stock") at an initial rate of 6.734 shares of Common Stock per $1,000 principal amount at maturity of Securities.

3. The purchase price to be paid by the Initial Purchaser for the Securities shall be $327.71, being an amount equal to the initial public offering price per $1,000 principal amount at maturity of Securities set forth above, less $10.14 per $1,000 principal amount at maturity of Securities.

4. Prior to February 16, 2004, the Securities will not be redeemable.

5. The redemption prices to be supplied on page 58 of the Offering Memorandum (and correspondingly in the Indenture) shall be:

Redemption Date	LYON Issue Price	Accrued Original Issue Discount at 5.5%	Redemption Price
February 16, 2004	$337.85	$105.29	$ 443.14
February 16, 2005	$337.85	$130.00	$ 467.85
February 16, 2006	$337.85	$156.09	$ 493.94
February 16, 2007	$337.85	$183.63	$ 521.48
February 16, 2008	$337.85	$212.70	$ 550.55
February 16, 2009	$337.85	$243.40	$ 581.25
February 16, 2010	$337.85	$275.81	$ 613.66
February 16, 2011	$337.85	$310.02	$ 647.87
February 16, 2012	$337.85	$346.15	$ 684.00
February 16, 2013	$337.85	$384.28	$ 722.13
February 16, 2014	$337.85	$424.55	$ 762.40

Redemption Date	LYON Issue Price	Accrued Original Issue Discount at 5.5%	Redemption Price
February 16, 2015	$337.85	$467.06	$ 804.91
February 16, 2016	$337.85	$511.93	$ 849.78
February 16, 2017	$337.85	$559.32	$ 897.17
February 16, 2018	$337.85	$609.34	$ 947.19
At Maturity	$337.85	$662.15	$1,000.00

6. The Purchase Dates and Purchase Prices to be supplied on page 59 of the Offering Memorandum and correspondingly in the Indenture shall be:

Purchase Date	Purchase Price
February 16, 2004	$443.14
February 16, 2009	$581.25
February 16, 2014	$762.40

7. The prices referred to in paragraphs 5 and 6 above are subject to adjustment upon the occurrence of a Tax Event, and the subsequent conversion of the Securities to semiannual coupon notes in the manner specified in the Offering Memorandum.

SCHEDULE B

List of Persons Subject to Lock-up Agreements

Persons	Number of shares of Common Stock that is exempt
William H. Rastetter, Ph.D.	40,000
Christopher J. Burman	20,000
Antonio J. Grillo-Lopez, M.D.	30,000
Nabil Hanna, Ph.D.	30,000
William R. Rohn	20,000
John Geigert, Ph.D.	0
Connie L. Matsui	20,000
Phillip M. Schneider	20,000
Kenneth J. Woolcott	20,000
Charles C. Edwards, M.D.	100
Alan Burnett Glassberg	0
John Groom	0
Kuzuhiro Hashimoto	0
Franklin P. Johnson, Jr	5,674
Robert W. Pangia	0
Bruce R. Ross	0
William D. Young	0
Genentech, Inc	0

Exhibit A

FORM OF REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (the "Agreement") is made and entered into as of February 16, 1999 between IDEC PHARMACEUTICALS CORPORATION, a Delaware corporation (the "Company"), and Merrill Lynch & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated, a Delaware corporation (the "Purchaser").

This Agreement is made pursuant to the Purchase Agreement, dated as of February 9, 1999 (the "Purchase Agreement"), between the Company and the Purchaser, which provides for the sale by the Company to the Purchaser of $300,000,000 aggregate principal amount at maturity of the Company's Liquid Yield Option(TM) Notes due 2019 (Zero Coupon-Subordinated) (the "LYONs") and the grant by the Company to the Purchaser of the option to purchase all or any part of an additional $45,000,000 aggregate principal amount at maturity of its LYONs. In order to induce Purchaser to enter into the Purchase Agreement, the Company has agreed to provide the registration rights set forth in this Agreement. The execution of this Agreement is a condition to the closing under the Purchase Agreement.

The parties hereby agree as follows:

Section 1. Definitions. Capitalized terms used herein without definition shall have their respective meanings set forth in the Purchase Agreement or Indenture. As used in this Agreement, the following terms shall have the following meanings:

Closing Date: February 16, 1999, or such other date as may be agreed upon for the sale and purchase of the LYONs pursuant to the Purchase Agreement.

Common Stock: Common stock, par value $0.001 per share, of the Company.

Exchange Act: The Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

Indenture: The Indenture, dated as of February 16, 1999, between the Company and Chase Manhattan Bank and Trust Company, as Trustee, pursuant to which the LYONs are being issued, as amended or supplemented from time to time in accordance with the terms thereof.

Person: An individual, partnership, limited liability company, corporation, association, trust, joint venture or any other unincorporated organization or entity.

Prospectus: The prospectus included in any Registration Statement (including, without limitation, a prospectus that discloses information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement, and all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference or deemed to be incorporated by reference in such prospectus.

Registrable Securities: All LYONs and shares of Common Stock issuable upon conversion of LYONs that are Restricted Securities.

Registration Expenses: See Section 5 hereof.

Registration Statement: Any registration statement of the Company that covers any of the Registrable Securities pursuant to the provisions of this Agreement, including the Prospectus, amendments and supplements to such registration statement, including post-effective amendments, all exhibits, and all material incorporated by reference or deemed to be incorporated by reference in such registration statement.

Restricted Securities: Any and all LYONs upon original issuance thereof (and any shares of Common Stock issuable upon conversion thereof other than pursuant to an effective registration statement under the Securities Act) and at all times subsequent thereto until, as to any restricted security, (i) the sale of such restricted security has been effectively registered under the Securities Act and such restricted security has been disposed of in accordance with the method of distribution set forth in the Registration Statement relating thereto, or (ii) it is distributed to the public, or is otherwise able to be sold, pursuant to Rule 144(k) (or any similar provision then in force, but not Rule 144A) under the Securities Act.

SEC: The Securities and Exchange Commission.

Securities Act: The Securities Act of 1933, as amended, and the rules and regulations promulgated by the SEC thereunder.

Shelf Registration: See Section 3 hereof.

Special Counsel: Shearman & Sterling, special counsel to the Purchaser, or such other special counsel as may be designated in writing to the Company by the holders of a majority in aggregate principal amount at maturity of Registrable Securities outstanding.

TIA: The Trust Indenture Act of 1939, as amended.

Section 2. Securities Subject to this Agreement.

(a) Securities. The securities entitled to the benefits of this Agreement are the Registrable Securities.

(b) Holders of Registrable Securities. A Person is deemed to be a holder of Registrable Securities whenever such Person beneficially owns Registrable Securities; provided that only Registrable Securities of holders who are registered holders of Registrable Securities shall be counted for purposes of calculating any proportion of holders of Registrable Securities entitled to take action or give notice pursuant to this Agreement.

Section 3. Shelf Registrations.

(a) Shelf Registrations. Within 180 days after the date hereof, the Company shall prepare and file with the SEC a Registration Statement (which may include any previously filed Registration Statement meeting the requirements set forth herein) under the Securities Act for an offering to be made on a continuous basis pursuant to Rule 415 (or any similar rule that may be adopted by the SEC) under the Securities Act covering all of the Registrable Securities (the "Shelf Registration").

(b) The Shelf Registration shall be on Form S-3 or another appropriate form permitting registration of such Registrable Securities for resale by such holders in the manner or manners designated by them.

(c) The Company shall use all reasonable efforts to cause the Shelf Registration to become effective under the Securities Act in accordance with Section 3(a) hereof and shall keep the Shelf Registration continuously effective until the earlier of (i) the sale pursuant to the Shelf Registration of all the Registrable Securities and (ii) the expiration of the holding period applicable to such Registrable Securities held by Persons that are not affiliates of the Company under Rule 144(k) under the Securities Act or any successor provision. The Company shall also supplement or make amendments to any Shelf Registration if required by the rules, regulations or instructions applicable to the registration form used by the Company or if required by the Securities Act.

(d) No holder of Registrable Securities may include any of its Registrable Securities in any prospectus pursuant to this Agreement unless and until such holder furnishes to the Company in writing, at least three business days prior to the effective date of the Registration Statement pursuant to the Shelf Registration, such information regarding such holder and the proposed distribution by such holder of such Registrable Securities as the Company may reasonably request in writing; provided that such holder shall have received such request at least 10 business days prior to the effective date of the Registration Statement pursuant to the Shelf Registration; provided further that if such information is furnished to the Company after such three business days prior to the effective date of the Registration Statement pursuant to the Shelf Registration, the Company will, within five business days of receipt of such information, file

with the SEC such amendments to the Registration Statement pursuant to the Shelf Registration as are necessary to permit such holder to deliver such prospectus to purchasers of Registrable Securities.

Section 4. Registration Procedures. (A) In connection with the registration obligations pursuant to Section 3 hereof, the Company shall use all reasonable efforts to effect such registration to permit the sale of such Registrable Securities in accordance with the then intended method or methods of disposition thereof, and pursuant thereto the Company shall as expeditiously as possible:

(a) prepare and file with the SEC, within the time period specified in Section 3, a Registration Statement or Registration Statements on any appropriate form under the Securities Act, which form shall be available for the sale of the Registrable Securities by the holders thereof in accordance with the intended method or methods of distribution thereof, and use all reasonable efforts to cause each such Registration Statement to become effective and remain effective as provided herein; provided, however, that before filing a Registration Statement or Prospectus or any amendments or supplements thereto, the Company shall furnish to the Special Counsel copies of the Registration Statement or Prospectus and all such documents in the form proposed to be filed (but excluding any exhibits thereto, including those incorporated by reference thereto, unless specifically requested by the Special Counsel) at least three business days prior thereto, which documents will be subject to the review of the Special Counsel, and the Company shall not file any such Registration Statement or amendment thereto or any Prospectus or any supplement thereto to which the Special Counsel shall reasonably object on a timely basis, unless the Company is advised by its counsel that such Registration Statement or amendment thereto or any Prospectus or supplement thereto is required to be filed by applicable law;

(b) prepare and file with the SEC such amendments and post-effective amendments to each Registration Statement as may be necessary to keep such Registration Statement continuously effective for the applicable period; cause the related Prospectus to be supplemented by any required Prospectus supplement, and as so supplemented to be filed pursuant to Rule 424 (or any similar provisions then in force) under the Securities Act;

(c) promptly notify the Special Counsel and, with respect to any event contemplated by clauses (i)(B), (iv), (v), (vi) or (vii) hereof, notify such registered holders of Registrable Securities promptly (and in each case, if requested, confirm any such oral or telephonic notice in writing), (i) when a Prospectus or any Prospectus supplement or post-effective amendment related to such Registrable Securities (A) has been filed and (B) with respect to a Registration Statement or any post-effective amendment related to such Registrable Securities, when the same has been filed and has become effective, (ii) of the receipt of any comments from the SEC relating to a Registration Statement, (iii) of any request by the SEC for amendments or supplements to a Registration Statement or related Prospectus or for additional information, (iv) of the issuance by the SEC of any stop order suspending the effectiveness of a

Registration Statement or the initiation of any proceedings for that purpose, (v) if at any time the representations and warranties of the Company contained in any agreement entered into pursuant to paragraph (1) below in connection with the sale of Restricted Securities by selling holders thereof cease to be true and correct in all material respects, (vi) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale or exchange in any jurisdiction of the United States of America or the initiation of any proceeding for such purpose, (vii) of the happening of any event that makes any statement of a material fact made in such Registration Statement or related Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue or that requires the making of any changes in a Registration Statement or related Prospectus so that such documents will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (provided that the timely filing of a report under the Exchange Act which is incorporated by reference in the Registration Statement and related Prospectus shall constitute effective notice under this subsection (vii)), and (viii) of the determination of the Company that a post-effective amendment to a Registration Statement would be appropriate;

(d) use every reasonable effort to obtain the withdrawal of any order suspending the effectiveness of a Registration Statement or the lifting of any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale or exchange in any jurisdiction of the United States of America, as promptly as practicable;

(e) if reasonably requested by any holder of Registrable Securities covered by a Registration Statement, (i) promptly incorporate in a Prospectus supplement or post-effective amendment such information as such holder reasonably requests to be included therein as is required by applicable law or as necessary so that the Registration Statement does not include an untrue statement of a material fact or omit to state a material fact with respect to such holder or such holder's planned method of distribution, (ii) make all required filings of such Prospectus supplement or such post-effective amendment as soon as the Company has received notification of the matters to be incorporated in such Prospectus supplement or such post-effective amendment, and (iii) supplement or make amendments to any Registration Statement as is required by applicable law;

(f) furnish to each selling holder of Registrable Securities upon request, and the Special Counsel, without charge, at least one conformed copy of the Registration Statement or Statements and any post-effective amendment thereto, including financial statements and schedules, without charge, as well as all documents incorporated therein by reference or deemed incorporated therein by reference and all exhibits (including those previously furnished or incorporated by reference), at the earliest practicable time under the circumstances after the filing of such documents with the SEC;

(g) deliver to each holder of Registrable Securities and the Special Counsel, without charge, copies of the Prospectus or Prospectuses (including each preliminary prospectus) and any amendment or supplement thereto; the Company consents to the use of such Prospectus or any amendment or supplement thereto in accordance with applicable law by each of the selling holders of Registrable Securities in connection with the offering and sale of the Registrable Securities covered by such Prospectus or any amendment or supplement thereto in accordance with applicable law;

(h) prior to any public offering of Registrable Securities, use all reasonable efforts to register or qualify or cooperate with the selling holders of Registrable Securities and the Special Counsel in connection with the registration or qualification (or exemption from such registration or qualification) of such Registrable Securities for offer and sale, as the case may be, under the securities or Blue Sky laws of such state or local jurisdictions in the United States as any seller reasonably requests in writing; keep each such registration or qualification (or exemption therefrom) effective during the period such Registration Statement is required to be kept effective and do any and all other acts or things necessary or advisable to enable the disposition in such jurisdictions of the Registrable Securities covered by the applicable Registration Statement; provided, however, that the Company will not be required to (i) qualify generally to do business in any jurisdiction where it is not then so qualified, (ii) take any action that would subject it to general service of process in any such jurisdiction where it is not then so subject, (iii) take any action that would subject it to taxation in any jurisdiction where it is not then subject or (iv) register or qualify securities prior to the effective date of any Registration Statement under Section 3 hereof;

(i) cooperate with the selling holders of Registrable Securities to facilitate the timely preparation and delivery of certificates representing Registrable Securities, which certificates shall not bear any restrictive legends; and enable such Registrable Securities to be in such denominations and registered in such names, in all cases consistent with the requirements set forth in the Indenture, as the holders may request;

(j) subject to the exceptions contained in (i), (ii), (iii) and (iv) of subsection (h) hereof, use all reasonable efforts to cause the Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other Federal, state and local governmental regulatory agencies or authorities in the United States as may be necessary, by virtue of the business and operations of the Company, to enable the seller or sellers thereof to consummate the disposition of such Registrable Securities and cooperate with each seller of such Registrable Securities in connection with any filings required to be made with the National Association of Securities Dealers, Inc.;

(k) upon the occurrence of any event contemplated by paragraph 4(A)(c)(vii) or 4(A)(c)(viii) above, as promptly as practicable thereafter, prepare and file with the SEC a supplement or post-effective amendment to the applicable Registration Statement or a

supplement to the related Prospectus or any document incorporated therein by reference or file any other required document so that, as thereafter delivered to the purchasers of the Registrable Securities being sold thereunder, such Prospectus will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;

(l) enter into such customary agreements and take all such other reasonable or necessary actions in connection therewith (including those reasonably requested by the holders of a majority of the Registrable Securities being sold) in order to expedite or facilitate the disposition of such Registrable Securities;

(m) cause the Indenture to be qualified under the TIA not later than the effective date of any Registration Statement; and in connection therewith, cooperate with the Trustee to effect such changes to the Indenture as may be required for the Indenture to be so qualified in accordance with the terms of the TIA and execute, and use all reasonable efforts to cause the Trustee to execute, all documents as may be required to effect such changes, and all other forms and documents required to be filed with the SEC to enable the Indenture to be so qualified in a timely manner; and

(n) to comply with all applicable rules and regulations of the SEC and make generally available to the Company's securityholders an earnings statement satisfying the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder no later than the date required for the filing of the applicable forms referred to in Rule 158 under the Exchange Act, commencing on the first day of the first fiscal quarter of the Company commencing after the effective date of a Registration Statement, which statement shall cover said 12-month period.

(B) (a) Purchaser shall, as a condition to the sale of any Registrable Security, require the holder to whom such Registrable Security is sold to agree to be bound by this Agreement with respect to the obligations of holders of Registrable Securities set forth herein. The Company may require each selling holder of Registrable Securities under a Shelf Registration to furnish to the Company such information regarding such selling holder and the distribution of such Registrable Securities, including the information specified in Item 507 of Regulation S-K under the Securities Act, as the Company may from time to time reasonably request in writing, and each holder in acquiring such Registrable Securities agrees to supply such information to the Company promptly upon such request. In addition, each such holder shall furnish to the Company all material information necessary to make any information previously furnished by such holder to the Company not misleading.

(b) Each holder of Registrable Securities agrees by acquisition of such Registrable Securities that (i) such holder will promptly (and in any case within two business days after completion of such sale or distribution) notify the Company following any sale of Registrable Securities under a Shelf Registration or distribution to the public pursuant to Rule

144(k) (or any similar provision then in force, but not Rule 144A under the Securities Act) and (ii) upon receipt of any notice from the Company of the happening of any event of the kind described in Section 4(A)(c)(iii), 4(A)(c)(iv), 4(A)(c)(vi), or 4(A)(c)(vii) hereof, such holder will forthwith discontinue disposition of such Registrable Securities covered by such Registration Statement or Prospectus and will not resume disposition of such Registrable Securities until such holder's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 4(A)(k) hereof, or until it is advised in writing by the Company that the use of the applicable Prospectus may be resumed and has received copies of the Registration Statement and Prospectus and any additional or supplemental filings that are incorporated or deemed to be incorporated by reference in such Prospectus. If so directed by the Company, such holder will deliver to the Company (at the Company's expense) all copies in its possession, other than permanent file copies then in such holder's possession, of the Prospectus covering such Registrable Securities current at the time of receipt of such notice.

(c) If the Company determines (at any time in its sole discretion), to suspend use of the Shelf Registration due to pending material corporate developments or similar material events that have not yet been publicly disclosed, the Company shall deliver a certificate in writing, signed by an authorized officer to the registered holders of Registrable Securities and the Special Counsel to the effect of the foregoing and upon receipt of such certificate such holders will forthwith discontinue disposition of such Registrable Securities covered by such Registration Statement or Prospectus and will not resume disposition of such Registrable Securities until such holders' receipt of copies of a supplemental or amended Prospectus, or until they are advised in writing by the Company that such Prospectus may be used and have received copies of any additional or supplemental filings that are incorporated or deemed incorporated by reference in such Prospectus. The Company will use reasonable efforts to ensure that use of the Shelf Registration statement may be resumed as promptly as is practicable. The period of time that the Shelf Registration statement is not available for sales as a result of events under this Section 4(B)(c) shall not exceed in the aggregate (A) 45 days in any 3 month period and (B) 90 days in any 12 month period. Each day that the Shelf Registration statement is not available for sales of Registrable Securities shall extend by such day the period of time that the Shelf Registration statement would have to remain effective under Section 3(c).

Section 5. Registration Expenses. The Company shall pay all fees and expenses incurred by it or Purchaser incident to the performance of or compliance with this Agreement by the Company including, without limitation, (i) all SEC, stock exchange or National Association of Securities Dealers, Inc. registration and filing fees, (ii) all fees and expenses incurred in connection with compliance with state securities or Blue Sky laws (including reasonable fees and disbursements of counsel for any underwriters or holders in connection with Blue Sky qualification of any of the Registrable Securities), (iii) all expenses in preparing or assisting in preparing, printing and distributing any Registration Statement, any Prospectus, any amendments or supplements thereto, other documents relating to the Company's performance of and compliance with this Agreement, and (iv) all rating agency fees but excluding fees of any special

accountants retained by the selling holders and transfer taxes, if any, relating to the sale or disposition of Registrable Securities by a holder of Registrable Securities.

Section 6. Indemnification; Contribution. (a) The Company agrees to indemnify and hold harmless the Purchaser and each holder of Registrable Securities and each person, if any, who controls the Purchaser or any holder of Registrable Securities within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus or the Prospectus (or any amendment or supplement thereto), or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, provided that (subject to Section 6(d) below) any such settlement is effected with the prior written consent of the Company; and

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply (x) to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with written information furnished to the Company by the Purchaser or such holder of Registrable Securities (which also acknowledges the indemnity provisions herein) and each person, if any, who controls the Purchaser or any such holder of Registrable Securities expressly for use in the Registration Statement (or any amendment thereto), or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) or (y) with respect to any preliminary prospectus to the extent

that any such loss, liability, claim, damage or expense, results from the fact the Purchaser or a holder of Registrable Securities sold securities to a person to whom there was not sent or given at or prior to the written confirmation of such sale, a final Prospectus (if the Company had previously furnished copies thereof and such final Prospectus is required by law to be delivered to such person), if the loss, liability, claim or expense of the Purchaser or such holder results from an untrue statement or alleged untrue statement or an omission or alleged omission contained in the preliminary prospectus that was corrected in the final Prospectus.

(b) In connection with any Shelf Registration in which a holder, including, without limitation, the Purchaser, of Registrable Securities is participating, in furnishing information relating to such holder of Registrable Securities to the Company in writing expressly for use in such Registration Statement, any preliminary prospectus, the Prospectus or any amendments or supplements thereto, the holders of such Registrable Securities agree, severally and not jointly, to indemnify and hold harmless the Purchaser and each person, if any, who controls the Purchaser within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and the Company, and each person, if any, who controls the Company within the meaning of either such Section, against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Company by such holder of Registrable Securities (which also acknowledges the indemnity provisions herein) and each person, if any, who controls any such holder of Registrable Securities expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto).

The Purchaser agrees to indemnify and hold harmless the Company, the holders of Registrable Securities, and each person, if any, who controls the Company or any holder of Registrable Securities within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), or any preliminary prospectus or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with written information furnished to the Company by the Purchaser expressly for use in the Registration Statement (or any amendment thereto) or such preliminary prospectus or the Prospectus (or any amendment or supplement thereto).

(c) Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not

relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

(e) If the indemnification provided for in this Section 6 is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, in such proportion as is appropriate to reflect the relative fault of the indemnifying party or parties on the one hand and of the indemnified party on the other hand in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative fault of the Company on the one hand and the holders of the Registrable Securities or the Purchaser on the other hand shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the holder of the Registrable Securities or the Purchaser and the parties' relative

intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 6(e) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 6(e). The aggregate amount of losses, liabilities, claims, damages, and expenses incurred by an indemnified party and referred to above in this Section 6(e) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 6, neither the holder of any Registrable Securities nor the Purchaser, shall be required to indemnify or contribute any amount in excess of the amount by which the total price at which the Registrable Securities sold by such holder of Registrable Securities or unwritten by the Purchaser, as the case may be, and distributed to the public were offered to the public exceeds the amount of any damages that such holder of Registrable Securities or the Purchaser has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 6(e), each person, if any, who controls the Purchaser or any holder of Registrable Securities within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as the Purchaser or such holder, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as the Company.

Section 7. Miscellaneous. (a) Remedies. In the event of a breach by any party to this Agreement of any of its obligations under this Agreement, the other party (or, in the event of a breach by the Company, each holder of Registrable Securities), in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Agreement. Each party agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall waive the defense that a remedy at law would be adequate.

(b) No Inconsistent Agreements. The Company shall not, during the term of this Agreement, enter into any agreement that is inconsistent with the rights granted to the holders of Registrable Securities in this Agreement or otherwise conflicts with the provisions hereof.

(c) Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented (other than to cure any ambiguity or correct or supplement any provision herein), and waivers or consents to departures from the provisions hereof may not be given, unless the Company has obtained the written consent of holders of a majority of the then outstanding aggregate principal amount at maturity of Registrable Securities, except in the case of the Purchaser prior to distribution of the LYONs to the holders, then the consent of the Purchaser. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of holders of Registrable Securities whose securities are being sold pursuant to a Registration Statement and that does not directly or indirectly affect the rights of other holders of Registrable Securities may be given by holders of at least a majority in aggregate principal amount at maturity of the Registrable Securities being sold by such holders.

(d) Notices. All notices and other communications provided for or permitted hereunder shall be made in writing by hand-delivery, registered first class mail, or telecopier:

(i) if to a holder of Registrable Securities, at the most current address set forth on the records of the registrar under the Indenture or given by such holder to the Company in accordance with the provisions of this Section 7(d), except with respect to the Purchaser prior to distribution of the LYONS, then to the Purchaser at the address set forth on the first page of the Purchase Agreement, attention of D. Casey Safreno (fax: (650) 849-2101) with a copy to William Hinman, Esq., Shearman & Sterling, 555 California Street, San Francisco, CA 94104 (fax: (415) 616-1199); and

(ii) if to the Company, to the attention of Phillip Schneider at IDEC Pharmaceuticals Corporation, 11011 Torreyana Road, San Diego, CA 92121 (fax: (619) 458-8887), with copies to Brobeck, Phleger & Harrison LLP, Two Embarcadero Place, 2200 Geng Road, Palo Alto, CA 94303, attention J. Stephan Dolezalek, Esq. (fax: (650) 496-2736), and thereafter by such other address, notice of which is given in accordance with the provision of this Section 7(d).

All such notices and communications shall be deemed to have been duly given: when delivered by hand, if personally delivered; five business days after being deposited in the mail, postage prepaid, if mailed; one business day after being sent by next-day delivery by a solvent air courier; and when receipt acknowledged, if telecopied.

Copies of all such notices, demands or other communications shall be concurrently delivered by the person giving the same to the Trustee under the Indenture at the address specified in such Indenture.

(e) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties, including without limitation and without the need for an express assignment, subsequent holders of Registrable Securities; provided that nothing herein shall be deemed to permit any assignment, transfer or other disposition of Registrable Securities in violation of the terms of the Purchase Agreement. If any transferee of any holder shall acquire Registrable Securities in any manner, whether by operation of law or otherwise, such Registrable Securities shall be subject to all of the terms of this Agreement and by taking and holding such Registrable Securities, such person shall be conclusively deemed to have agreed to be bound by and to perform all of the terms and provisions of this Agreement and such person shall be entitled to receive the benefits hereof. The Initial Purchaser (in its capacity as Initial Purchaser) shall have no liability or obligation to the Company with respect to any failure by a holder of Registrable Securities to comply with, or any breach by such holder of, any obligations of such holder under this Agreement.

(f) Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

(g) Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(h) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

(i) Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their best efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such which may be hereafter declared invalid, void or unenforceable.

(j) Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement, and is intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained

herein. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein, with respect to the registration rights granted by the Company with respect to the securities sold pursuant to the Purchase Agreement. This Agreement supersedes all prior agreements and understandings between the parties with respect to such subject matter.

(k) Securities Held by the Company or its Affiliates; Calculation of Percentage of Registrable Securities. Whenever the consent or approval of holders of a specified percentage of Registrable Securities is required hereunder, (i) Registrable Securities held by the Company or any of its affiliates shall not be counted in determining whether such consent or approval was given by the holders of such required percentage or amount and (ii) any shares of Common Stock that are included among the outstanding Registrable Securities, or the applicable portions thereof, shall be deemed, subject to the terms of clause (i) above, to represent the principal amount at maturity of LYONs from which such shares were converted at the time of such conversion.

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

IDEC PHARMACEUTICALS CORPORATION

By /s/ Phillip M. Schneider

Name: Phillip M. Schneider
Title: Vice President and Chief Financial Officer

MERRILL LYNCH & CO.
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED

By /s/ Mark J. Robinson

Name: Mark J. Robinson
Title: Vice President

Exhibit B

FORM OF OPINION OF COUNSEL TO THE COMPANY
TO BE DELIVERED PURSUANT TO
SECTION 5(a)

(i) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware.

(ii) The Company has full corporate power and corporate authority to own, lease and operate its properties and to conduct its business as described in the Offering Memorandum and to enter into and perform its obligations under the Purchase Agreement.

(iii) The Company is duly qualified as a foreign corporation in the United States to transact business and is in good standing in each jurisdiction in the United States in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not result in a Material Adverse Effect.

(iv) To our knowledge, the authorized, issued and outstanding capital stock of the Company is as set forth in the Offering Memorandum in the column entitled "Actual" under the caption "Capitalization" except for subsequent issuances, if any, pursuant to the Purchase Agreement or pursuant to reservations, agreements, employee benefit plans or the exercise of convertible securities or options referred to in the Offering Memorandum; the shares of issued and outstanding capital stock of the Company have been duly authorized and the shares of Common Stock issuable upon conversion of the Securities have been duly authorized and, when issued in accordance with the terms of the Indenture and the Securities, will be validly issued, fully paid and non-assessable.

(v) The Purchase Agreement has been duly authorized, executed and delivered by the Company.

(vi) The Indenture has been duly authorized, executed and delivered by the Company and (assuming the due authorization, execution and delivery thereof by the Trustee), constitutes a valid and binding agreement to the Company enforceable against the Company in accordance with its terms, except to the extent that enforceability may be limited by (A) bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, arrangement, moratorium, fraudulent transfer and other similar laws relating to or affecting rights of creditors generally and (B) general equitable principles whether considered in a proceeding at law or in equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of any court of competent

jurisdiction in awarding specific performance or injunctive relief and other equitable remedies.

(vii) The Registration Rights Agreement has been duly authorized, executed and delivered by the Company and constitutes a valid and binding agreement of the Company enforceable against the Company in accordance with its terms, except to the extent that enforceability may be limited by (A) bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, arrangement, moratorium, fraudulent transfer and other similar laws relating to or affecting rights of creditors' generally and (B) general equitable principles whether considered in a proceeding at law or in equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of any court of competent jurisdiction in awarding specific performance or injunctive relief and other equitable remedies.

(viii) The documents incorporated by reference in the Offering Memorandum (except for the financial statements and other financial data included therein or omitted therefrom, as to which we need express no opinion), as of the date they were filed with the Commission, appear on their face to have been appropriately responsive in all material respects to the requirements of the 1934 Act and the 1934 Act Regulations.

(ix) The Securities, the Indenture and the registration Rights Agreement conform in all material respect to the description thereof contained in the Offering Memorandum.

(x) The Securities in the form contemplated by the Indenture have been duly authorized by the Company and, when executed by the Company and authenticated by the Trustee in the manner provided in the Indenture (assuming the due authorization, execution and delivery of the Indenture by the Trustee) and issued and delivered against payment of the purchase price therefor will constitute valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except to the extent that enforceability may be limited by (A) bankruptcy, insolvency (including, without limitation, all laws relating to fraudulent transfers), reorganization, arrangement, moratorium, fraudulent transfer and other similar laws relating to or affecting rights of creditors' generally and (B) general equitable principles whether considered in a proceeding at law or in equity; the holders of the Securities are entitled to the benefits of the Indenture; and such Securities are convertible to shares of Common Stock in accordance with the terms of the Indenture, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of any court of competent jurisdiction in awarding specific performance or injunctive relief and other equitable remedies.

(xi) No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any United States federal or California state court, governmental authority or agency other than such as may be required under the 1933 Act and applicable securities laws of California is required in connection with the due authorization, execution and delivery of the Purchase Agreement or the execution, delivery or performance of the Indenture

and the Registration Rights Agreement by the Company or for the valid authorization, issuance, sale and delivery of the Securities to the Initial Purchaser in accordance with the terms of the Purchase Agreement and of the Common Stock issuable upon conversion of the Securities.

(xii) It is not necessary in connection with the offer, sale and delivery of the Securities to the Initial Purchaser and to each Subsequent Purchaser in the manner contemplated by the Purchase Agreement and the Offering Memorandum to register the Securities under the 1933 Act or to qualify the Indenture under the Trust indenture Act.

(xiii) The execution, delivery and performance of the Purchase Agreement, the DTC Agreement, the Indenture, the Registration Rights Agreement and the Securities and the consummation of the transactions contemplated in the Purchase Agreement and in the Offering Memorandum and compliance by the Company with its obligations under the Purchase Agreement, the Indenture and the Securities do not and will not, whether with or without the giving of notice or lapse of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined in Section 1(a)(xv) of the Purchase Agreement) under or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any subsidiary thereof pursuant to any contract, indenture, mortgage, deed of trust, loan or credit agreement, note , lease or any other agreement or instrument, filed as an exhibit to any 1934 Act filing or incorporated by reference in the Offering Memorandum, to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of the property or assets of the Company or any subsidiary thereof is subject (except for such conflicts, breaches or defaults or liens, charges, or encumbrances that would not have a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter or by-laws of the Company or any of its subsidiaries, or any applicable United States federal or California state law, statute, rule, regulation, judgment, order, writ or decree, known to us, of any United States federal or California state government instrumentality or court having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations.

(xiv) The information in the Offering Memorandum under the headings "Business-Litigation," "Description of Capital Stock", "Description of the LYONs," and "Certain Federal Income Tax Considerations" has been reviewed by us and is correct in all material respects.

(xv) There is not pending or, to the best of our knowledge, threatened any action, suit, proceeding, inquiry or investigation, to which the Company or any subsidiary is a party, or to which the property of the Company or any subsidiary thereof is subject, before or brought by any United Stated federal or California state court or governmental agency or body, which might reasonably be expected to result in a Material Adverse Effect, or which might reasonably be expected to materially and adversely affect the properties or assets thereof or the consummation of the transactions contemplated in the Purchase Agreement or the performance by the Company of its obligations thereunder or the transactions contemplated by the Offering Memorandum.

(xvi) All descriptions in the Offering Memorandum of contracts and other documents to which the Company or any of its subsidiaries are a party are accurate in all material respects; to our knowledge, there are no franchises, contracts, indentures, mortgages, loan agreements, notes, leases or other instruments that would be required to be described in the Offering Memorandum that are not described or referred to in the Offering Memorandum other than those described or referred to therein or in the Offering Memorandum other than those described or referred to therein or incorporated by reference thereto, and the description thereof or references thereto are correct in all material respects.

(xvii) To our knowledge, the Company is not in violation of its charter or by-laws.

In addition, we participated in conferences with certain officers and representatives of the Company, its independent public accountants, the Initial Purchaser and the Initial Purchaser's counsel at which the contents of the Offering Memorandum and related matters were discussed. We are not, however, passing upon, and do not assume any responsibility for, and we have not independently checked or verified, the accuracy, completeness or fairness of the information contained in the Offering Memorandum. In addition, we are not experts on patent, FDA or regulatory issues and we are not passing upon, and do not assume any responsibility for, and we have not independently checked or verified, the accuracy, completeness or fairness of the information contained in the Offering Memorandum with respect to such issues.

We may state, however, that based upon our participation as described in the preceding paragraph, (i) we confirm that we have no reason to believe that (other than the financial statements, including the notes and schedules thereto, and the other financial data included therein, as to which we express no belief), at the time the Offering Memorandum was issued, the Offering Memorandum contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading; and (ii) we confirm that we have no reason to believe that (other than the financial statements, including the notes and schedules thereto, and the other financial data included therein, as to which we express no belief) the Offering Memorandum, on the date hereof, contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

Nothing has come to our attention that would lead us to believe that the Offering Memorandum or any amendment or supplement thereto (except for financial statements and schedules and other financial data included or incorporated by reference therein or omitted therefrom, as to which we need make no statement), at the time the Offering Memorandum was issued at the time any such amended or supplemented Offering Memorandum was issued or at the Closing Time, included or includes an untrue statement of a material fact or omitted or omits circumstances under which they were made, not misleading.

Exhibit C

FORM OF OPINION OF REGULATORY
AFFAIRS COUNSEL TO THE COMPANY

DRAFT

February 9, 1999

MERRILL LYNCH & CO.
Merrill Lynch, Pierce, Fenner
& Smith Incorporated
North Tower
World Financial Center
New York, N.Y. 10281-1209

Ladies & Gentlemen:

We have acted as special regulatory counsel to IDEC Pharmaceuticals Corporation (the "Company") with respect to U.S. Food and Drug Administration ("FDA") regulatory matters in connection with the Purchase Agreement, dated February 9, 1999, between the Company and Merrill Lynch, Pierce, Fenner & Smith Incorporated ("the Purchase Agreement"). This opinion is furnished to you at the request of the Company pursuant to Section 5(b) of the Purchase Agreement. Each capitalized term used but not defined herein shall have the meaning ascribed thereto in the Purchase Agreement.

We have read the statements in the final Offering Memorandum dated February 9, 1999 under the captions "Risk Factors - Failure to Obtain Product Approvals or Comply with Government Regulations Could Adversely Affect our Business" and "Business - Regulation of Products by the FDA." We are of the opinion that the statements included under such captions that summarize provisions of the Federal Food, Drug and Cosmetic Act and the Public Health Service Act and implementing regulations are correct in all material respects.

In addition, although we have made no independent inquiry, nothing has come to our attention that leads us to believe that the statements in the final Offering Memorandum under the captions "Risk Factors - Failure to Obtain Product Approvals or Comply with Government Regulations Could Adversely Affect our Business" and "Business - Regulation of Products by

the FDA," as of the date of the Offering Memorandum or at the Closing Time, contained or contain any untrue statement of a material fact relating to the Company or FDA matters or omitted or omit to state any material fact relating to the Company or FDA matters which is necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

As to the factual matters addressed herein, we have relied without independent investigation upon the attached certificate of the Company.

This opinion is rendered solely for your benefit in connection with the transaction described above. This opinion may not be used or relied upon by any other person or entity and may not be disclosed, quoted, filed with a governmental agency, or otherwise referred to without our express prior written consent. This opinion is limited to the matters stated herein, and no opinion or belief is implied or may be inferred beyond the matters expressly stated herein.

Sincerely,

Exhibit D

FORM OF OPINION OF INTELLECTUAL PROPERTY COUNSEL
TO THE COMPANY

DRAFT

February , 1999

Merrill Lynch & Co.
Merrill Lynch, Pierce, Fenner
& Smith Incorporated
North Tower
World Financial Center
New York, N.Y. 10281-1209

Ladies and Gentlemen:

As counsel for IDEC Pharmaceuticals Corporation (IDEC), a California corporation, for its patent matters, we have been asked to provide you with an opinion letter concerning the patent activities and matters we have handled for the Company. We are familiar with the efforts of the Company to obtain patent rights in the United States and abroad. We have read the portions of the Offering Memorandum entitled "Risk Factors - We May Be Unable to Adequately Protect or Enforce Our Intellectual Property Rights or Secure Rights to Third Party Patents", and "Business - Patents and Proprietary Technology" (collectively, "the Intellectual Property Portion"). The opinions given below are based on our files maintained in the course of representing the Company, and an inquiry of attorneys within Burns, Doane, Swecker & Mathis who perform legal services of the Company.

Subject to the qualifications herein stated, we are of the opinion that:

(1) To the best of our knowledge, we are not aware of any legal actions, claims or proceedings pending or threatened against the Company alleging that the Company is infringing or otherwise violating any patents or trade secrets owned by others and to the best of our knowledge, the Company has not received any communication in which it is alleged that the Company is infringing or violating the patent rights of third parties.

(2) The Intellectual Property Portion of the Offering Memorandum contains accurate and complete descriptions of the Company's patent applications, issued and allowed patents, and

patents licensed to the Company and fairly summarize the legal matters, documents and proceedings relating thereto.

(3) To the best of our knowledge, at least 20 United States patents have issued to the Company, and the Company is the Assignee of record, and the patents are being maintained by the Company.

(4) To the best of our knowledge, at least 15 additional U.S. patent applications have been filed by the Company in the U.S. Patent and Trademark Office; those pending patent applications have been properly prepared as to form and have been assigned to the Company, which assignments are either recorded in the U.S. Patent and Trademark Office or have been submitted for recording in the U.S. Patent and Trademark Office; and each of these patent applications is being pursued by the Company.

(5) To the best of our knowledge, with respect to patent applications that have been assigned to the Company, we have no reason to believe that such assignments are invalid.

(6) To the best of our knowledge, at least 200 foreign counterpart patent applications have been filed on behalf of the Company.

(7) To the extent that the Intellectual Property Portion contains descriptions which constitute matters of law or legal conclusions, these descriptions are correct in all material respects and fairly present the patent situation of the Company.

(8) To the best of our knowledge, there are no legal or government proceedings other than patent applications pending, relating to patent rights of the Company to which the Company is a party and, to our knowledge, no such proceedings are threatened or contemplated by government authorities or others.

(9) Although we have not conducted comprehensive product clearance investigations, to the best of our knowledge, all subject matter areas, of which we are aware, in which the Company could be prevented by third-party-held patents from manufacturing and selling, in the United States and abroad, the compositions and methods claimed in the patent applications described in the Appendix to this opinion, have been disclosed in the Offering Memorandum.

(10) In addition, although we have not independently verified the accuracy, completeness or fairness of the statements contained in the Offering Memorandum (except that we have independently verified the accuracy of the matters contained in (3), (4) and (6) hereof), nothing has come to our attention that would cause us to believe that the statements in the Intellectual Property Portion in the Offering Memorandum, as of the date of the Offering Memorandum or as of the date hereof, included or includes an untrue statement of a material fact or omit or omitted to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading as to patent matters (it being

understood that we have not participated in the negotiation of or reviewed the Company's license agreements and we have not undertaken any independent investigation as to whether the Company is infringing any patents or other rights of others or whether the Company owns or possesses sufficient licenses or other rights to use all patents or other rights necessary for the conduct of the Company's business).

This opinion letter is furnished to you as the underwriter and solely for your benefit and may not be make available to or relied upon by any other person, firm, or entity without our prior written consent. The foregoing information is being furnished as of the date of this letter, and we do not undertake an advisory obligation after this date if knowledge hereafter would result in a change herein.

Very truly yours,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By

E. Joseph Gess

By

Robin L. Teskin

Exhibit E

FORM OF LOCK-UP LETTER AGREEMENT

February *, 1999

MERRILL LYNCH & CO.
Merrill Lynch, Pierce, Fenner & Smith Incorporated,
North Tower
World Financial Center
New York, New York 10281-1209

Re: Proposed Offering by IDEC Pharmaceuticals Corporation of Liquid Yield Option Notes(TM) due 2019

Dear Sirs:

The undersigned, a stockholder [and an officer and/or director] of IDEC Pharmaceuticals Corporation, a Delaware corporation (the "Company"), understands that Merrill Lynch & Co., Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch") proposes to enter into a Purchase Agreement (the "Purchase Agreement") with the Company providing for the offering of the Company's Liquid Yield Option Notes(TM) due 2019 (the "Initial Securities") and the grant by the Company to Merrill Lynch of the option to purchase additional Securities to cover over-allotments, if any (the "Option Securities"). The Initial Securities, together with the Option Securities, are collectively the "Securities." In recognition of the benefit that such an offering will confer upon the undersigned as a stockholder [and an officer and/or director] of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with Merrill Lynch that, during a period of 90 days from the date of the Purchase Agreement, the undersigned will not, without the prior written consent of Merrill Lynch, directly or indirectly, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, or otherwise dispose of or transfer any shares of the Company's common stock, par value $0.001 per share (the "Common Stock"), or any securities convertible into or exchangeable or exercisable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or file any registration statement under the Securities Act of 1933, as amended, with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of

ownership of Common Stock or any securities convertible into or exchangeable for Common Stock, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to such number of shares of Common Stock, whether now owned or hereafter acquired by the undersigned, as specified in Schedule B to the Purchase Agreement.

Very truly yours,

Signature:

Print Name:

EXHIBIT 4.9

FIRST AMENDMENT TO THE RIGHTS AGREEMENT AND CERTIFICATION OF COMPLIANCE WITH SECTION 27 THEREOF

Pursuant to Section 27 of the Rights Agreement (the "Agreement") dated as of July 22, 1997, between IDEC PHARMACEUTICALS CORPORATION, a Delaware corporation (the "Company"), and CHASE MELLON SHAREHOLDER SERVICES, LLC, a national banking association (the "Rights Agent"), the Company and the Rights Agent hereby amend the Agreement as of September 17, 1998, as provided below.

1. Certain Definitions. Section 1 of the Agreement shall be amended as follows:

   (a) The definition of Acquiring Person shall be amended as follows: (1) the phrase "(upon approval by a majority of the Continuing Directors (as such term is hereinafter defined))" shall be deleted in subsection (a)(ii) and (2) the phrase "a majority of the Continuing Directors" shall be replaced with the phrase "the Board of Directors of the Company" in subsection (a)(iii).

   (b) The definition of Beneficial Owner and to "beneficially own" shall be amended by deleting the phrase ", upon the affirmative vote of a majority of Continuing Directors," from subsection (c)(ii)(A).

   (c) The definition of Continuing Directors shall be deleted.

2. Issue of Rights Certificates. Section 3(a) of the Agreement shall be amended by deleting the phrase "(upon approval by a majority of the Continuing Directors)" in the first sentence of the paragraph.

3. Adjustment of Purchase Price, Number of Shares or Number of Rights. Section 11 shall be amended as follows:

   (a) The phrase ", upon approval by a majority of the Continuing Directors," which appears once in the second paragraph of subsection (a)(ii), three times in subsection (a)(iv), once in subsection (b), once in subsection(c), once in subsection (d)(i) and once in subsection (d)(ii) shall be deleted.

   (b) The phrase "at least a majority of the Continuing Directors" in subsection (a)(iii) shall be replaced with the phrase "the Board of Directors of the Company."

   (c) The phrase "and approved by a majority of the Continuing Directors" in subsection (a)(iv) shall be deleted.

   (d) The phrase ", subject to approval by a majority of the Continuing Directors," in subsection (a)(iv) shall be deleted.

4. Consolidation, Merger or Sale or Transfer of Assets or Earning Power. Section 13(d) shall be amended by deleting the phrase, "upon approval by a majority of the Continuing Directors," in the second sentence of the paragraph.

5. Fractional Rights and Fractional Shares. Section 14(a) shall be amended by deleting the phrase ", upon approval by a majority of the Continuing Directors," in the third to last and second to last sentences of the paragraph.

6. Issuance of New Rights Certificates. Section 22 shall be amended by deleting the phrase ", upon approval by a majority of the Continuing Directors," in the first and second sentences of the paragraph.

7. Redemption. Section 23 shall be amended as follows:

   (a) The phrase "by a majority of the Continuing Directors" that appears three times in the first sentence of subsection (a) shall be replaced with the phrase "the Board of Directors of the Company".

   (b) The phrase ", upon the approval by the majority of the Continuing Directors" in the last sentence of subsection (a) shall be deleted.

8. Exchange. Section 24 shall be amended as follows:

(a) The phrase "a majority of Continuing Directors" in the first sentence of subsection (a) shall be replaced with the phrase "the Board of Directors of the Company".

(b) The phrase "and upon approval by a majority of the Continuing Directors" and the phrase ", and approved by a majority of the Continuing Directors," in the first sentence of subsection (d) shall both be deleted.

(c) The phrase ", upon approval by a majority of the Continuing Directors," in the second to last sentence of subsection (d) shall be deleted.

9. Supplements and Amendments. Section 27 shall be amended as follows: (a) The phrase ", upon approval by a majority of the Continuing Directors," in the first sentence of the paragraph shall be deleted. (b) The phrase "and approval by a majority of the Continuing Directors," in the second and last sentences of the paragraph shall be deleted.

10. Determination and Actions by the Board of Directors. Section 29 shall be amended as follows:

(a) The phrase "(and, where specifically provided for herein, only upon approval by a majority of the Continuing Directors)" in the second sentence of the paragraph shall be deleted.

(b) The phrase "(or, where specifically provided for herein, upon approval by a majority of the Continuing Directors)" in the last sentence of the paragraph shall be deleted.

(c) The phrase "or the Continuing Directors" in the last sentence of subsection (a) shall be deleted.

11. Severability. Section 31 shall be amended by deleting the phrase ",upon approval by a majority of the Continuing Directors," in the paragraph.

The undersigned officer of the Company, being an appropriate officer of the Company and authorized to do so by resolution of the board of directors of the Company dated as of September 17, 1998, hereby certifies to the Rights Agent that these amendments are in compliance with the terms of Section 27 of the Agreement.

IDEC PHARMACEUTICALS CORPORATION

By: /s/ Phillip M. Schneider

Name: Phillip M. Schneider
Title: Vice President and Chief Financial Officer

Acknowledged and Agreed:
CHASE MELLON SHAREHOLDER SERVICES, LLC
As Rights Agent

By: /s/ Rosa M. Bautista

Name: Rosa M. Bautista
Title: Relationship Manager

EXHIBIT 4.10

IDEC PHARMACEUTICALS CORPORATION

Liquid Yield Option(TM) Notes
due 2019
(Zero Coupon-Subordinated)

INDENTURE

Dated as of February 16, 1999

CHASE MANHATTAN BANK
AND TRUST COMPANY, National Association,

TRUSTEE

(TM)Trademark of Merrill Lynch & Co., Inc.

CROSS REFERENCE TABLE(1)

TIA Section	Indenture Section
310(a)(1)	7.10
(a)(2)	7.10
(b)	7.08; 7.10
311(a)	7.11
(b)	7.11
312(a)	2.05
(b)	12.03
(c)	12.03
313(a)	7.06
(b)(2)	7.06
(c)	12.02
(d)	7.06
314(a)	4.02; 4.03; 12.02
(c)(1)	12.04
(c)(2)	12.04
(e)	12.05
315(a)	7.01
(b)	7.05; 12.02
(c)	7.01
(d)	7.01
(e)	6.11
316(a) (last sentence)	2.08
(a)(1)(A)	6.05
(a)(1)(B)	6.04
(b)	6.07
317(a)(1)	6.08
(a)(2)	6.09
(b)	2.04
318(a)	12.01

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(1) Note: This Cross Reference Table shall not, for any purpose, be deemed to be part of the Indenture.

TABLE OF CONTENTS(1)

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(1) Note: This Table of Contents shall not, for any purpose, be deemed to be part of the Indenture.

INDENTURE dated as of February 16, 1999 between IDEC PHARMACEUTICALS CORPORATION, a Delaware corporation (the "Company"), and CHASE MANHATTAN BANK AND TRUST COMPANY, National Association, a national banking association organized under the laws of the United States (the "Trustee").

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Company's Liquid Yield Option(TM) Notes due 2019 (Zero Coupon-Subordinated) ("Securities"):

ARTICLE 1

DEFINITIONS AND INCORPORATION BY REFERENCE

SECTION 1.01. Definitions.

"144A Global Security" means a permanent Global Security in the form of the Security attached hereto as Exhibit A-1, and that is deposited with and registered in the name of the Depositary, representing Securities sold in reliance on Rule 144A under the Securities Act.

"Affiliate" of any specified person means any other person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified person. For the purposes of this definition, "control" when used with respect to any specified person means the power to direct or cause the direction of the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing.

"Applicable Procedures" means, with respect to any transfer or transaction involving a Global Security or beneficial interest therein, the rules and procedures of the Depositary for such Security, in each case to the extent applicable to such transaction and as in effect from time to time.

"Board of Directors" means either the board of directors of the Company or any duly authorized committee of such board.

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(TM) Trademark of Merrill Lynch & Co., Inc.

"Business Day" means each day of the year other than a Saturday or a Sunday on which banking institutions are not required or authorized to close in the City of New York or San Francisco.

"Capital Stock" for any corporation means any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) stock issued by that corporation.

"Certificated Securities" means Securities that are in the form of the Securities attached hereto as Exhibit A-2.

"Common Stock" shall mean the shares of Common Stock, $0.001 par value, of the Company as it exists on the date of this Indenture or any other shares of Capital Stock of the Company into which the Common Stock shall be reclassified or changed.

"Company" means the party named as the "Company" in the first paragraph of this Indenture until a successor replaces it pursuant to the applicable provisions of this Indenture and, thereafter, shall mean such successor. The foregoing sentence shall likewise apply to any subsequent such successor or successors.

"Company Request" or "Company Order" means a written request or order signed in the name of the Company by its Chairman of the Board, its President, a Senior Vice President or a Vice President, and by its Treasurer, an Assistant Treasurer, its Secretary or an Assistant Secretary, and delivered to the Trustee.

"Consolidated Net Assets" means the total amount of assets of the Company and its Subsidiaries (less applicable depreciation, amortization and other valuation reserves), after deducting therefrom all current liabilities of the Company and its Subsidiaries (other than intercompany liabilities and the current portion of long-term debt, capitalized lease obligations and other indebtedness), all as set forth on the latest consolidated balance sheet of the Company at the end of each calendar quarter prepared in accordance with generally accepted accounting principles.

"Debt" means with respect to the Company at any date, without duplication, obligations (other than nonrecourse obligations) for borrowed money or evidenced by bonds, debentures, notes or similar instruments.

"Default" means any event which is, or after notice or passage of time or both would be, an Event of Default.

"Global Securities" means Securities that are in the form of the Securities attached hereto as Exhibit A-1, and to the extent that such Securities are required to bear the Legend required by Section 2.06, such Securities will be in the form of a 144A Global Security.

"Holder" or "Securityholder" means a person in whose name a Security is registered on the Registrar's books.

"Indenture" means this Indenture, as amended or supplemented from time to time in accordance with the terms hereof, including the provisions of the TIA that are deemed to be a part hereof.

"Institutional Accredited Investor Security" means a Security in the form of the Security attached hereto as Exhibit A-2, representing Securities sold to institutional "accredited investors" (as defined in Rule 501(a)(1), (2), (3) and (7) under the Securities Act).

"Issue Date" of any Security means the date on which the Security was originally issued or deemed issued as set forth on the face of the Security.

"Issue Price" of any Security means, in connection with the original issuance of such Security, the initial issue price at which the Security is sold as set forth on the face of the Security.

"Officer" means the Chairman of the Board, the President, any Senior Vice President, any Vice President, the Treasurer or the Secretary or any Assistant Treasurer or Assistant Secretary of the Company.

"Officers' Certificate" means a written certificate containing the information specified in Sections 13.04 and 13.05, signed in the name of the Company by its Chairman of the Board, its President, a Senior Vice President or a Vice President, and by its Treasurer, an Assistant Treasurer, Chief Financial Officer its Secretary or an Assistant Secretary, and delivered to the Trustee. An Officers' Certificate given pursuant to Section 4.03 shall be signed by the principal executive, financial or accounting officer of the Company but need not contain the information specified in Sections 13.04 and 13.05.

"Opinion of Counsel" means a written opinion containing the information specified in Sections 13.04 and 13.05, from legal counsel who is acceptable to the Trustee. The counsel may be an employee of, or counsel to, the Company or the Trustee.

"Original Issue Discount" of any Security means the difference between the Issue Price and the Principal Amount at Maturity of the Security as set forth on the face of the Security.

"person" or "Person" means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization, or government or any agency or political subdivision thereof.

"Principal Amount at Maturity" of a Security means the Principal Amount at Maturity as set forth on the face of the Security.

"Redemption Date" or "redemption date" shall mean the date specified for redemption of the Securities in accordance with the terms of the Securities and this Indenture.

"Redemption Price" or "redemption price" shall have the meaning set forth in paragraph 5 of the Securities.

"Responsible Officer," when used with respect to the Trustee, means any officer within the Corporate Trust Department (or any successor group) including without limitation any vice president, any assistant vice president, any assistant secretary or any other officer of the Trustee customarily performing functions similar to those performed by any of the above-designated officers and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of his knowledge of and familiarity with the particular subject.

"Restricted Security" means a Security required to bear the restrictive legend set forth in the form of Security set forth in Exhibits A-1 and A-2 of this Indenture.

"Rule 144A" means Rule 144A under the Securities Act (or any successor provision), as it may be amended from time to time.

"SEC" means the Securities and Exchange Commission.

"Securities" means any of the Company's Liquid Yield Option Notes due 2019 (Zero Coupon-Subordinated), as amended or supplemented from time to time, issued under this Indenture.

"Securityholder" or "Holder" means a person in whose name a Security is registered on the Registrar's books.

"Senior Indebtedness" means the principal, premium (if any) and unpaid interest on all present and future (i) indebtedness of the Company for borrowed money, (ii) obligations of the Company evidenced by bonds, debentures, notes or similar instruments, (iii) all obligations of the Company under (a) interest rate swaps, caps, collars, options, and similar arrangements, (b) any foreign exchange contract, currency swap contract, futures contract, currency option contract, or other foreign currency hedge, and (c) credit swaps, caps, floors, collars and similar arrangements, (iv) indebtedness incurred, assumed or guaranteed by the Company in connection with the acquisition by it or a subsidiary of the Company of any business, properties or assets (except purchase-money indebtedness classified as accounts payable under generally accepted accounting principles), (v) all obligations and liabilities (contingent or otherwise) in respect of leases of the Company required, in conformity with generally accepted accounting principles, to be accounted for as capitalized lease obligations on the balance sheet of the Company and all obligations and liabilities (contingent or otherwise) under any lease or related document

(including a purchase agreement) in connection with the lease or real property which provides that the Company is contractually obligated to purchase or cause a third party to purchase the leased property and thereby guarantee a minimum residual value of the leased property to the lessor and the obligations of the Company under such lease or related document to purchase or to cause a third party to purchase such leased property, (vi) reimbursement obligations of the Company in respect of letters of credit relating to indebtedness or other obligations of the Company that qualify as indebtedness or obligations of the kind referred to in clauses (i) through (v) above, and (vii) obligations of the Company under direct or indirect guaranties in respect of, and obligations (contingent or otherwise) to purchase or otherwise acquire, or otherwise to assure a creditor against loss in respect of, indebtedness or obligations of others of the kinds referred to in clauses (i) through (vi) above, in each case unless in the instrument creating or evidencing the indebtedness or obligation or pursuant to which the same is outstanding it is provided (i) that such indebtedness or obligation is not senior in right of payment to the Securities or (ii) that such indebtedness or obligation is subordinated to any other indebtedness or obligation of the Company, unless such indebtedness or obligation expressly provides that such indebtedness or obligations be senior in right of payment to the Securities.

"Special Record Date" means for the payment of any Defaulted Interest, the date fixed by the Trustee pursuant to Section 10.02(b).

"Stated Maturity", when used with respect to any Security, means the date specified in such Security as the fixed date on which an amount equal to the Principal Amount at Maturity of such Security is due and payable.

"Subsidiary" means (i) a corporation, a majority of whose Capital Stock with voting power, under ordinary circumstances, to elect directors is, at the date of determination, directly or indirectly owned by the Company, by one or more Subsidiaries of the Company or by the Company and one or more Subsidiaries of the Company, (ii) a partnership in which the Company or a Subsidiary of the Company holds a majority interest in the equity capital or profits of such partnership, or (iii) any other person (other than a corporation) in which the Company, a Subsidiary of the Company or the Company and one or more Subsidiaries of the Company, directly or indirectly, at the date of determination, has (x) at least a majority ownership interest or (y) the power to elect or direct the election of a majority of the directors or other governing body of such person.

"Tax Event" means that the Company shall have received an opinion from independent tax counsel experienced in such matters to the effect that, on or after February 9, 1999, as a result of (a) any amendment to, or change (including any announced prospective change) in, the laws (or any regulations thereunder) of the United States or any political subdivision or taxing authority thereof or therein or (b) any amendment to, or change in, an interpretation or application of such laws or regulations by any legislative body, court, governmental agency or regulatory authority, in each case which amendment or change is

enacted, promulgated, issued or announced or which interpretation is issued or announced or which action is taken, on or after February 9, 1999, there is more than an insubstantial risk that interest (including Original Issue Discount) payable on the Securities either (i) would not be deductible on a current accrual basis or (ii) would not be deductible under any other method, in either case in whole or in part, by the Company (by reason of deferral, disallowance, or otherwise) for United States Federal income tax purposes.

"TIA" means the Trust Indenture Act of 1939 as in effect on the date of this Indenture, provided, however, that in the event the TIA is amended after such date, TIA means, to the extent required by any such amendment, the TIA as so amended.

"trading day" means a day during which trading in securities generally occurs on the National Association of Securities Dealers Automated Quotation System or, if the Common Stock is not quoted on the National Association of Securities Dealers Automated Quotation System, on the principal national or regional securities exchange on which the Common Stock is then listed or, if the Common Stock is not listed on a national or regional securities exchange, on the principal other market on which the Common Stock is then traded.

"Trustee" means the party named as the "Trustee" in the first paragraph of this Indenture until a successor replaces it pursuant to the applicable provisions of this Indenture and, thereafter, shall mean such successor. The foregoing sentence shall likewise apply to any subsequent such successor or successors.

SECTION 1.02. Other Definitions.

Term	Defined in Section
"Agent Members"	2.12(e)
"Associate"	3.09(a)
"Average Quoted Price"	11.01
"Bankruptcy Law"	6.01
"beneficial owner"	3.09(a)
"cash"	3.08(b)
"Change in Control"	3.09(a)
"Change in Control Purchase Date"	3.09(a)
"Change in Control Purchase Notice"	3.09(c)
"Change in Control Purchase Price"	3.09(a)
"Company Notice"	3.08(e)
"Company Notice Date"	3.08(c)
"Conversion Agent"	2.03
"Conversion Date"	11.02

Term	Defined in Section
"Conversion Rate"	11.01
"Custodian"	6.01
"Defaulted Interest"	10.02(b)
"Depositary"	2.01(a)
"DTC"	2.01(a)
"Event of Default"	6.01
"Exchange Act"	3.08(d)
"Ex-Dividend Time"	11.01
"Extraordinary Cash Dividend"	11.08
"Institutional Accredited Investors"	2.01(b)
"Interest Payment Date"	10.01
"Legal Holiday"	13.08
"Legend"	2.06(f)
"Market Price"	3.08(d)
"Notice of Default"	6.01
"Option Exercise Date"	10.01
"Paying Agent"	2.03
"Purchase Date"	3.08(a)
"Purchase Notice"	3.08(a)
"Purchase Price"	3.08(a)
"QIBs"	2.01(a)
"Quoted Price"	11.01
"Registrar"	2.03
"Regular Record Date"	10.01
"Restated Principal Amount"	10.01
"Rights"	11.19
"Rights Agreements"	11.19
"Rule 144A Information"	4.06
"Sale Price"	3.08(d)
"Securities Act"	3.08(d)
"Tax Event Date"	10.01
"Time of Determination"	11.01

SECTION 1.03. Incorporation by Reference of Trust Indenture Act. Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture. The following TIA terms used in this Indenture have the following meanings:

"Commission" means the SEC.

"indenture securities" means the Securities.

"indenture security holder" means a Securityholder.

"indenture to be qualified" means this Indenture.

"indenture trustee" or "institutional trustee" means the Trustee.

"obligor" on the indenture securities means the Company.

All other TIA terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule have the meanings assigned to them by such definitions.

SECTION 1.04. Rules of Construction. Unless the context otherwise requires:

(1) a term has the meaning assigned to it;

(2) an accounting term not otherwise defined has the meaning assigned to it in accordance with generally accepted accounting principles as in effect from time to time;

(3) "or" is not exclusive;

(4) "including" means including, without limitation; and

(5) words in the singular include the plural, and words in the plural include the singular.

ARTICLE 2

THE SECURITIES

SECTION 2.01. Form and Dating. The Securities and the Trustee's certificate of authentication shall be substantially in the form of Exhibits A-1 and A-2, which are a part of this Indenture. The Securities may have notations, legends or endorsements required by law, stock exchange rule or usage (provided that any such notation, legend or endorsement required by usage is in a form acceptable to the Company). The Company shall provide any such notations, legends or endorsements to the Trustee in writing. Each Security shall be dated the date of its authentication.

(a) 144A Global Securities. Securities offered and sold within the United States to qualified institutional investors as defined in Rule 144A ("QIBs") in reliance on Rule 144A shall be issued, initially in the form of a 144A Global Security, which shall be deposited

with the Trustee at its corporate trust offices, as custodian for the Depositary and registered in the name of The Depository Trust Company ("DTC") or the nominee thereof (such depositary, or any successor thereto, and any such nominee being hereinafter referred to as the "Depositary"), duly executed by the Company and authenticated by the Trustee as hereinafter provided. The aggregate principal amount of the 144A Global Securities may from time to time be increased or decreased by adjustments made on the records of the Trustee and the Depositary as hereinafter provided.

(b) Institutional Accredited Investor Securities. Except as provided in this Section 2.01, 2.06 or 2.12, owners of beneficial interests in Global Securities will not be entitled to receive physical delivery of Certificated Securities. Securities offered and sold within the United States to institutional accredited investors as defined in Rule 501(a)(1), (2) (3) and (7) under the Securities Act ("Institutional Accredited Investors") shall be issued, initially in the form of an Institutional Accredited Investor Security, duly executed by the Company and authenticated by the Trustee as hereinafter provided.

(c) Global Securities in General. Each Global Security shall represent such of the outstanding Securities as shall be specified therein and each shall provide that it shall represent the aggregate amount of outstanding Securities from time to time endorsed thereon and that the aggregate amount of outstanding Securities represented thereby may from time to time be reduced or increased, as appropriate, to reflect exchanges, redemptions and conversions. Any adjustment of the aggregate principal amount of a Global Security to reflect the amount of any increase or decrease in the amount of outstanding Securities represented thereby shall be made by the Trustee in accordance with instructions given by the Holder thereof as required by Section 2.12 hereof and shall be made on the records of the Trustee and the Depositary.

(d) Book-Entry Provisions. This Section 2.01(d) shall apply only to Global Securities deposited with or on behalf of the Depositary.

The Company shall execute and the Trustee shall, in accordance with this Section 2.01(d), authenticate and deliver initially one or more Global Securities that (a) shall be registered in the name of the Depositary, (b) shall be delivered by the Trustee to the Depositary or pursuant to the Depositary's instructions and (c) shall bear legends substantially to the following effect:

"UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY (AND ANY PAYMENT HEREON IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED

REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN. TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS, IN WHOLE BUT NOT IN PART, TO NOMINEES OF THE DEPOSITORY TRUST COMPANY OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN ARTICLE TWO OF THE INDENTURE REFERRED TO ON THE REVERSE HEREOF."

(e) Certificated Securities. Securities not issued as interests in the Global Securities will be issued in certificated form substantially in the form of Exhibit A-2 attached hereto.

SECTION 2.02. Execution and Authentication. The Securities shall be executed on behalf of the Company by its Chairman of the Board, its President, one of its Senior Vice Presidents or one of its Vice Presidents, and attested by its Secretary, one of its Assistant Secretaries, one of its Senior Vice Presidents or one of its Vice Presidents. The signature of any of these officers on the Securities may be manual or facsimile.

Securities bearing the manual or facsimile signatures of individuals who were at the time of the execution of the Securities the proper Officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of authentication of such Securities.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein duly executed by the Trustee by manual signature of an authorized officer, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder.

The Trustee shall authenticate and deliver Securities for original issue in an aggregate Principal Amount at Maturity of up to $345,000,000 upon a Company Order without any further action by the Company. The aggregate Principal Amount at Maturity of Securities outstanding at any time may not exceed the amount set forth in the foregoing sentence, except as provided in Section 2.07.

The Securities shall be issued only in registered form without coupons and only in denominations of $1,000 of Principal Amount at Maturity and any integral multiple thereof.

SECTION 2.03. Registrar, Paying Agent and Conversion Agent. The Company shall maintain an office or agency where Securities may be presented for registration of transfer or for exchange ("Registrar"), an office or agency where Securities may be presented for purchase or payment ("Paying Agent") and an office or agency where Securities may be presented for conversion ("Conversion Agent"). The Registrar shall keep a register of the Securities and of their transfer and exchange. The Company may have one or more co-registrars, one or more additional paying agents and one or more additional conversion agents. The term Paying Agent includes any additional paying agent, including any named pursuant to Section 4.05. The term Conversion Agent includes any additional conversion agent, including any named pursuant to Section 4.05.

The Company shall enter into an appropriate agency agreement with any Registrar, Paying Agent, Conversion Agent or co-registrar (other than the Trustee). The agreement shall implement the provisions of this Indenture that relate to such agent. The Company shall notify the Trustee of the name and address of any such agent. If the Company fails to maintain a Registrar, Paying Agent or Conversion Agent, the Trustee shall act as such and shall be entitled to appropriate compensation therefor pursuant to Section 7.07. The Company or any Subsidiary or an Affiliate of either of them may act as Paying Agent, Registrar, Conversion Agent or co-registrar.

The Company initially appoints the Trustee as Registrar, Conversion Agent and Paying Agent in connection with the Securities.

SECTION 2.04. Paying Agent to Hold Money and Securities in Trust. Except as otherwise provided herein, on or prior to each due date of payments in respect of any Security, the Company shall deposit with the Paying Agent a sum of money (in immediately available funds if deposited on the due date) or Common Stock sufficient to make such payments when so becoming due. The Company shall require each Paying Agent (other than the Trustee) to agree in writing that the Paying Agent shall hold in trust for the benefit of Securityholders or the Trustee all money and Common Stock held by the Paying Agent for the making of payments in respect of the Securities and shall notify the Trustee of any default by the Company in making any such payment. At any time during the continuance of any such default, the Paying Agent shall, upon the written request of the Trustee, forthwith pay to the Trustee all money and Common Stock so held in trust. If the Company, a Subsidiary or an Affiliate of either of them acts as Paying Agent, it shall segregate the money and Common Stock held by it as Paying Agent and hold it as a separate trust fund. The Company at any time may require a Paying Agent to pay all money and Common Stock held by it to the Trustee and to account for any funds and Common Stock disbursed by it. Upon doing so, the Paying Agent shall have no further liability for the money or Common Stock.

SECTION 2.05. Securityholder Lists. The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of

Securityholders. If the Trustee is not the Registrar, the Company shall cause to be furnished to the Trustee at least semiannually on May 1 and November 1 a listing of Securityholders dated within 15 days of the date on which the list is furnished and at such other times as the Trustee may request in writing a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of Securityholders.

SECTION 2.06. Transfer and Exchange. Subject to Section 2.12 hereof, (a) upon surrender for registration of transfer of any Security, together with a written instrument of transfer satisfactory to the Registrar duly executed by the Securityholder or such Securityholder's attorney duly authorized in writing, at the office or agency of the Company designated as Registrar or co-registrar pursuant to Section 2.03, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Securities of any authorized denomination or denominations, of a like aggregate Principal Amount at Maturity. The Company shall not charge a service charge for any registration of transfer or exchange, but the Company may require payment of a sum sufficient to pay all taxes, assessments or other governmental charges that may be imposed in connection with the transfer or exchange of the Securities from the Securityholder requesting such transfer or exchange.

At the option of the Holder, Securities may be exchanged for other Securities of any authorized denomination or denominations, of a like aggregate Principal Amount at Maturity, upon surrender of the Securities to be exchanged, together with a written instrument of transfer satisfactory to the Registrar duly executed by the Securityholder or such Securityholder's attorney duly authorized in writing, at such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

The Company shall not be required to make, and the Registrar need not register, transfers or exchanges of Securities selected for redemption (except, in the case of Securities to be redeemed in part, the portion thereof not to be redeemed) or any Securities in respect of which a Purchase Notice or Change in Control Purchase Notice has been given and not withdrawn by the Holder thereof in accordance with the terms of this Indenture (except, in the case of Securities to be purchased in part, the portion thereof not to be purchased) or any Securities for a period of 15 days before a selection of Securities to be redeemed.

(b) Notwithstanding any provision to the contrary herein, so long as a Global Security remains outstanding and is held by or on behalf of the Depositary, transfers of a Global Security, in whole or in part, shall be made only in accordance with Section 2.12 and this Section 2.06(b). Transfers of a Global Security shall be limited to transfers of such Global Security in whole, or in part, to nominees of the Depositary or to a successor of the Depositary or such successor's nominee.

(c) Successive registrations and registrations of transfers and exchanges as aforesaid may be made from time to time as desired, and each such registration shall be noted on the register for the Securities.

(d) Any Registrar appointed pursuant to Section 2.03 hereof shall provide to the Trustee such information as the Trustee may reasonably require in connection with the delivery by such Registrar of Securities upon transfer or exchange of Securities.

(e) No Registrar shall be required to make registrations of transfer or exchange of Securities during any periods designated in the text of the Securities or in this Indenture as periods during which such registration of transfers and exchanges need not be made.

(f) If Securities are issued upon the transfer, exchange or replacement of Securities subject to restrictions on transfer and bearing the legends set forth on the form of Security attached hereto as Exhibits A-1 and A-2 setting forth such restrictions (collectively, the "Legend"), or if a request is made to remove the Legend on a Security, the Securities so issued shall bear the Legend, or the Legend shall not be removed, as the case may be, unless (i) there is delivered to the Company and the Registrar such satisfactory evidence, which shall include an Opinion of Counsel, as may be reasonably required by the Company and the Registrar, that neither the Legend nor the restrictions on transfer set forth therein are required to ensure that transfers thereof comply with the provisions of Rule 144A or Rule 144 under the Securities Act or that such Securities are not "restricted" within the meaning of Rule 144 under the Securities Act. Upon (i) provision of such satisfactory evidence, or (ii) notification by the Company to the Trustee and Registrar of the sale of such Security pursuant to a registration statement that is effective at the time of such sale, the Trustee, at the written direction of the Company, shall authenticate and deliver a Security that does not bear the Legend. If the Legend is removed from the face of a Security and the Security is subsequently held by an Affiliate of the Company, the Legend shall be reinstated.

SECTION 2.07. Replacement Securities. If (a) any mutilated Security is surrendered to the Trustee, or (b) the Company and the Trustee receive evidence to their satisfaction of the destruction, loss or theft of any Security, and there is delivered to the Company and the Trustee such security or indemnity as may be required by them to save each of them harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and upon its written request the Trustee shall authenticate and deliver, in exchange for any such mutilated Security or in lieu of any such destroyed, lost or stolen Security, a new Security of like tenor and Principal Amount at Maturity, bearing a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, or is about to be purchased by the Company pursuant to

Article 3 hereof, the Company in its discretion may, instead of issuing a new Security, pay or purchase such Security, as the case may be.

Upon the issuance of any new Securities under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security issued pursuant to this Section in lieu of any mutilated, destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all benefits of this Indenture equally and proportionately with any and all other Securities duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

SECTION 2.08. Outstanding Securities; Determinations of Holders' Action. Securities outstanding at any time are all the Securities authenticated by the Trustee except for those cancelled by it, those delivered to it for cancellation and those described in this Section 2.08 as not outstanding. A Security does not cease to be outstanding because the Company or an Affiliate thereof holds the Security; provided, however, that in determining whether the Holders of the requisite Principal Amount at Maturity of Securities have given or concurred in any request, demand, authorization, direction, notice, consent or waiver hereunder, Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or such other obligor shall be disregarded and deemed not to be outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which the Trustee knows to be so owned shall be so disregarded. Subject to the foregoing, only Securities outstanding at the time of such determination shall be considered in any such determination (including, without limitation, determinations pursuant to Articles 6 and 9).

If a Security is replaced pursuant to Section 2.07, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Security is held by a bona fide purchaser.

If the Paying Agent holds, in accordance with this Indenture, on a Redemption Date, or on the Business Day following the Purchase Date or a Change in Control Purchase Date, or on Stated Maturity, money or securities, if permitted hereunder, sufficient to pay Securities payable on that date, then immediately after such Redemption Date, Purchase Date, Change in Control Purchase Date or Stated Maturity, as the case may be, such Securities shall cease to be

outstanding and Original Issue Discount and interest, if any, on such Securities shall cease to accrue; provided that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made.

If a Security is converted in accordance with Article 11, then from and after the time of conversion on the Conversion Date, such Security shall cease to be outstanding and Original Issue Discount and interest, if any, shall cease to accrue on such Security.

SECTION 2.09. Temporary Securities. Pending the preparation of definitive Securities, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as conclusively evidenced by their execution of such Securities.

If temporary Securities are issued, the Company will cause definitive Securities to be prepared without unreasonable delay. After the preparation of definitive Securities, the temporary Securities shall be exchangeable for definitive Securities upon surrender of the temporary Securities at the office or agency of the Company designated for such purpose pursuant to Section 2.03, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like Principal Amount at Maturity of definitive Securities of authorized denominations. Until so exchanged the temporary Securities shall in all respects be entitled to the same benefits under this Indenture as definitive Securities.

SECTION 2.10. Cancellation. All Securities surrendered for payment, purchase by the Company pursuant to Article 3, conversion, redemption or registration of transfer or exchange shall, if surrendered to any person other than the Trustee, be delivered to the Trustee and shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and all Securities so delivered shall be promptly cancelled by the Trustee. The Company may not issue new Securities to replace Securities it has paid or delivered to the Trustee for cancellation or that any Holder has converted pursuant to Article 11. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. All cancelled Securities held by the Trustee shall be destroyed by the Trustee and the Trustee shall deliver a certificate of destruction to the Company.

SECTION 2.11. Persons Deemed Owners. Prior to due presentment of a Security for registration of transfer, the Company, the Trustee and any agent of the Company or the

Trustee may treat the Person in whose name such Security is registered as the owner of such Security for the purpose of receiving payment of principal of the Security or the payment of any Redemption Price, Purchase Price or Change in Control Purchase Price in respect thereof, and interest thereon, for the purpose of conversion and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

SECTION 2.12. Global Securities.

(a) Notwithstanding any other provisions of this Indenture or the Securities, (A) transfers of a Global Security, in whole or in part, shall be made only in accordance with Section 2.06 and Section 2.12(a)(i), (B) transfer of a beneficial interest in a Global Security for a Certificated Security shall comply with Section 2.06 and Section 2.12(a)(ii) below, and (C) transfers of a Certificated Security shall comply with Section 2.06 and Section 2.12(a)(iii) and (iv) below.

(i) Transfer of Global Security. A Global Security may not be transferred, in whole or in part, to any Person other than the Depositary or a nominee or any successor thereof, and no such transfer to any such other Person may be registered; provided that this clause (i) shall not prohibit any transfer of a Security that is issued in exchange for a Global Security but is not itself a Global Security. No transfer of a Security to any Person shall be effective under this Indenture or the Securities unless and until such Security has been registered in the name of such Person. Nothing in this Section 2.12(a)(i) shall prohibit or render ineffective any transfer of a beneficial interest in a Global Security effected in accordance with the other provisions of this Section 2.12(a).

(ii) Restrictions on Transfer of a Beneficial Interest in a Global Security for a Certificated Security. A beneficial interest in a Global Security may not be exchanged for a Certificated Security except upon satisfaction of the requirements set forth below. Upon receipt by the Trustee of a transfer of a beneficial interest in a Global Security in accordance with Applicable Procedures for a Certificated Security in the form satisfactory to the Trustee, together with:

(a) so long as the Securities are Restricted Securities, certification, in the form set forth in Exhibit B-1, and, if requested by the Company or the Registrar, certification in the form set forth in Exhibit B-2, that such beneficial interest in the Global Security is being transferred to an Institutional Accredited Investor in accordance with Sections 501(a)(1), (2), (3) or (7) of the Securities Act; and

(b) written instructions to the Trustee to make, or direct the Registrar to make, an adjustment on its books and records with respect to such Global

Security to reflect a decrease in the aggregate Principal Amount at Maturity of the Securities represented by the Global Security, such instructions to contain information regarding the Depositary account to be credited with such decrease,

then the Trustee shall cause, or direct the Registrar to cause, in accordance with the standing instructions and procedures existing between the Depositary and the Registrar, the aggregate Principal Amount at Maturity of Securities represented by the Global Security to be decreased by the aggregate Principal Amount at Maturity of the Certificated Security to be issued, shall issue such Certificated Security and shall debit or cause to be debited to the account of the Person specified in such instructions a beneficial interest in the Global Security equal to the Principal Amount at Maturity of the Certificated Security so issued.

(iii) Transfer and Exchange of Certificated Securities. When Certificated Securities are presented to the Registrar with a request:

(x) to register the transfer of such Certificated Securities; or

(y) to exchange such Certificated Securities for an equal Principal Amount at Maturity of Certificated Securities of other authorized denominations,

the Registrar shall register the transfer or make the exchange as requested if its reasonable requirements for such transaction are met; provided, however, that the Certificated Securities surrendered for transfer or exchange:

(a) shall be duly endorsed or accompanied by a written instrument of transfer in form reasonably satisfactory to the Company and the Registrar, duly executed by the Holder thereof or his attorney duly authorized in writing; and

(b) so long as such Securities are Restricted Securities, such Securities are being transferred or exchanged pursuant to an effective registration statement under the Securities Act or pursuant to clause (A), (B) or (C) below, and are accompanied by the following additional information and documents, as applicable:

(A) if such Certificated Securities are being delivered to the Registrar by a Holder for registration in the name of such Holder, without transfer, a certification from such Holder to that effect; or

(B) if such Certificated Securities are being transferred to the Company, a certification to that effect; or

(C) if such Certificated Securities are being transferred pursuant to an exemption from registration in accordance with Rule 144, (i) a certification to that effect (in the form set forth in Exhibit B-1) and (ii) if the Company or Registrar so requests, an opinion of counsel or other evidence reasonably satisfactory to them as to the compliance with the restrictions set forth in the Legend.

(iv) Restrictions on Transfer of a Certificated Security for a Beneficial Interest in a Global Security. A Certificated Security may not be exchanged for a beneficial interest in a Global Security except upon satisfaction of the requirements set forth below.

Upon receipt by the Trustee of a Certificated Security, duly endorsed or accompanied by appropriate instruments of transfer, in form satisfactory to the Trustee, together with:

(a) so long as the Securities are Restricted Securities, certification, in the form set forth in Exhibit B-1, that such Certificated Security is being transferred to a Qualified Institutional Buyer in accordance with Rule 144A; and

(b) written instructions directing the Trustee to make, or to direct the Registrar to make, an adjustment on its books and records with respect to such Global Security to reflect an increase in the aggregate Principal Amount at Maturity of the Securities represented by the Global Security, such instructions to contain information regarding the Depositary account to be credited with such increase,

then the Trustee shall cancel such Certificated Security and cause, or direct the Registrar to cause, in accordance with the standing instructions and procedures existing between the Depositary and the Registrar, the aggregate Principal Amount at Maturity of Securities represented by the Global Security to be increased by the aggregate Principal Amount at Maturity of the Certificated Security to be exchanged, and shall credit or cause to be credited to the account of the Person specified in such instructions a beneficial interest in the Global Security equal to the Principal Amount at Maturity of the Certificated Security so cancelled. If no Global Securities are then outstanding, the Company shall issue and the Trustee shall authenticate, upon written order of the Company in the form of an Officers' Certificate, a new Global Security in the appropriate Principal Amount at Maturity.

(b) Subject to the succeeding paragraph, every Security shall be subject to the restrictions on transfer provided in the Legend. Whenever any Restricted Security is presented or surrendered for registration of transfer or for exchange for a Security registered in a name other than that of the Holder, such Security must be accompanied by a certificate in substantially the form set forth in Exhibit B-1, dated the date of such surrender and signed by the Holder of such

Security, as to compliance with such restrictions on transfer. The Registrar shall not be required to accept for such registration of transfer or exchange any Security not so accompanied by a properly completed certificate.

(c) The restrictions imposed by the Legend upon the transferability of any Security shall cease and terminate when such Security has been sold pursuant to an effective registration statement under the Securities Act or transferred in compliance with Rule 144 under the Securities Act (or any successor provision thereto) or, if earlier, upon the expiration of the holding period applicable to sales thereof under Rule 144(k) under the Securities Act (or any successor provision). Any Security as to which such restrictions on transfer shall have expired in accordance with their terms or shall have terminated may, upon a surrender of such Security for exchange to the Registrar in accordance with the provisions of this Section 2.12 (accompanied, in the event that such restrictions on transfer have terminated by reason of a transfer in compliance with Rule 144 or any successor provision, by an opinion of counsel having substantial experience in practice under the Securities Act and otherwise reasonably acceptable to the Company, addressed to the Company and in form acceptable to the Company, to the effect that the transfer of such Security has been made in compliance with Rule 144 or such successor provision), be exchanged for a new Security, of like tenor and aggregate Principal Amount at Maturity, which shall not bear the restrictive Legend. The Company shall inform the Trustee of the effective date of any registration statement registering the Securities under the Securities Act. The Trustee shall not be liable for any action taken or omitted to be taken by it in good faith in accordance with the aforementioned opinion of counsel or registration statement.

(d) As used in the preceding two paragraphs of this Section 2.12, the term "transfer" encompasses any sale, pledge, transfer, hypothecation or other disposition of any Security.

(e) The provisions of clauses (1), (2), (3) and (4) below shall apply only to Global Securities:

(1) Notwithstanding any other provisions of this Indenture or the Securities, except as provided in Section 2.12(a)(ii), a Global Security shall not be exchanged in whole or in part for a Security registered in the name of any Person other than the Depositary or one or more nominees thereof, provided that a Global Security may be exchanged for Securities registered in the names of any person designated by the Depositary in the event that (i) the Depositary has notified the Company that it is unwilling or unable to continue as Depositary for such Global Security or such Depositary has ceased to be a "clearing agency" registered under the Exchange Act, and a successor Depositary is not appointed by the Company within 90 days or (ii) an Event of Default has occurred and is continuing with respect to the Securities. Any Global Security exchanged pursuant to clause (i) above shall be so exchanged in whole and not in part, and any Global Security exchanged pursuant to clause (ii) above may be exchanged in

whole or from time to time in part as directed by the Depositary. Any Security issued in exchange for a Global Security or any portion thereof shall be a Global Security; provided that any such Security so issued that is registered in the name of a Person other than the Depositary or a nominee thereof shall not be a Global Security.

(2) Securities issued in exchange for a Global Security or any portion thereof shall be issued in definitive, fully registered form, without interest coupons, shall have an aggregate Principal Amount at Maturity equal to that of such Global Security or portion thereof to be so exchanged, shall be registered in such names and be in such authorized denominations as the Depositary shall designate and shall bear the applicable legends provided for herein. Any Global Security to be exchanged in whole shall be surrendered. by the Depositary to the Trustee, as Registrar. With regard to any Global Security to be exchanged in part, either such Global Security shall be so surrendered for exchange or, if the Trustee is acting as custodian for the Depositary or its nominee with respect to such Global Security, the Principal Amount at Maturity thereof shall be reduced, by an amount equal to the portion thereof to be so exchanged, by means of an appropriate adjustment made on the records of the Trustee. Upon any such surrender or adjustment, the Trustee shall authenticate and deliver the Security issuable on such exchange to or upon the order of the Depositary or an authorized representative thereof.

(3) Subject to the provisions of clause (5) below, the registered Holder may grant proxies and otherwise authorize any Person, including Agent Members and persons that may hold interests through Agent Members, to take any action which a holder is entitled to take under this Indenture or the Securities.

(4) In the event of the occurrence of any of the events specified in clause (1) above, the Company will promptly make available to the Trustee a reasonable supply of Certificated Securities in definitive, fully registered form, without interest coupons.

(5) Neither any members of, or participants in, the Depositary ("Agent Members") nor any other Persons on whose behalf Agent Members may act shall have any rights under this Indenture with respect to any Global Security registered in the name of the Depositary or any nominee thereof, or under any such Global Security, and the Depositary or such nominee, as the case may be, may be treated by the Company, the Trustee and any agent of the Company or the Trustee as the absolute owner and holder of such Global Security for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Trustee or any agent of the Company or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or such nominee, as the case may be, or impair, as between the Depositary, its Agent Members and any other person on whose behalf an Agent Member may act, the operation of customary practices of such Persons governing the exercise of the rights of a holder of any Security.

SECTION 2.13. CUSIP Numbers. The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee of any change in the CUSIP numbers.

ARTICLE 3

REDEMPTION AND PURCHASES

SECTION 3.01. Right to Redeem; Notices to Trustee. The Company, at its option, may redeem the Securities in accordance with the provisions of paragraphs 5 and 7 of the Securities. If the Company elects to redeem Securities pursuant to paragraph 5 of the Securities, it shall notify the Trustee in writing of the Redemption Date, the Principal Amount at Maturity of Securities to be redeemed and the Redemption Price.

The Company shall give the notice to the Trustee provided for in this Section 3.01 by a Company Order, in the case of any redemption of less than all of the Securities, at least 45 days before the Redemption Date and, in the case of any redemption of all of the Securities, on or prior to the date of notice of redemption (in each case, unless a shorter notice shall be satisfactory to the Trustee).

SECTION 3.02. Selection of Securities to Be Redeemed. If less than all the Securities are to be redeemed, the Trustee shall select the Securities to be redeemed pro rata or by lot or by any other method the Trustee considers fair and appropriate (so long as such method is not prohibited by the rules of any stock exchange on which the Securities are then listed). The Trustee shall make the selection at least 30 days but not more than 60 days before the Redemption Date from outstanding Securities not previously called for redemption. The Trustee may select for redemption portions of the Principal Amount at Maturity of Securities that have denominations larger than $1,000. Securities and portions of them the Trustee selects shall be in Principal Amounts at Maturity of $1,000 or an integral multiple of $1,000. Provisions of this Indenture that apply to Securities called for redemption also apply to portions of Securities called for redemption. The Trustee shall notify the Company promptly of the Securities or portions of Securities to be redeemed.

If any Security selected for partial redemption is converted in part before termination of the conversion right with respect to the portion of the Security so selected, the

converted portion of such Security shall be deemed (so far as may be) to be the portion selected for redemption. Securities which have been converted during a selection of Securities to be redeemed may be treated by the Trustee as outstanding for the purpose of such selection.

SECTION 3.03. Notice of Redemption. At least 30 days but not more than 60 days before a Redemption Date, the Company shall mail a notice of redemption by first-class mail, postage prepaid, to each Holder of Securities to be redeemed.

The notice shall identify the Securities to be redeemed and shall state:

(1) the Redemption Date;

(2) the Redemption Price;

(3) the Conversion Rate;

(4) the name and address of the Paying Agent and Conversion Agent;

(5) that Securities called for redemption may be converted at any time before the close of business on the Redemption Date;

(6) that Holders who want to convert Securities must satisfy the requirements set forth in paragraph 8 of the Securities;

(7) that Securities called for redemption must be surrendered to the Paying Agent to collect the Redemption Price;

(8) if fewer than all the outstanding Securities are to be redeemed, the certificate number and Principal Amounts at Maturity of the particular Securities to be redeemed;

(9) that, unless the Company defaults in making payment of such Redemption Price, Original Issue Discount on Securities called for redemption, and interest, if any, will cease to accrue on and after the Redemption Date; and

(10) the CUSIP number of the Securities.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at the Company's expense, provided that the Company makes such request at least three Business Days prior to such notice of redemption.

SECTION 3.04. Effect of Notice of Redemption. Once notice of redemption is given, Securities called for redemption become due and payable on the Redemption Date and at the Redemption Price stated in the notice except for Securities which are converted in accordance with the terms of this Indenture. Upon surrender to the Paying Agent, such Securities shall be paid at the Redemption Price stated in the notice.

SECTION 3.05. Deposit of Redemption Price. Prior to or on the Redemption Date, the Company shall deposit with the Paying Agent (or if the Company or a Subsidiary or an Affiliate of either of them is the Paying Agent, shall segregate and hold in trust) money sufficient to pay the Redemption Price of all Securities to be redeemed on that date other than Securities or portions of Securities called for redemption which on or prior thereto have been delivered by the Company to the Trustee for cancellation or have been converted. The Paying Agent shall as promptly as practicable return to the Company any money, with interest, if any, thereon (subject to the provisions of Section 7.01(f)) not required for that purpose because of conversion of Securities pursuant to Article 11. If such money is then held by the Company in trust and is not required for such purpose it shall be discharged from such trust.

SECTION 3.06. Securities Redeemed in Part. Upon surrender of a Security that is redeemed in part, the Company shall execute and the Trustee shall authenticate and deliver to the Holder a new Security in an authorized denomination equal in Principal Amount at Maturity to the unredeemed portion of the Security surrendered.

SECTION 3.07. Conversion Arrangement on Call for Redemption. In connection with any redemption of Securities, the Company may arrange for the purchase and conversion of any Securities called for redemption by an agreement with one or more investment bankers or other purchasers to purchase such Securities by paying to the Trustee in trust for the Securityholders, on or before the close of business on the Redemption Date, an amount that, together with any amounts deposited with the Trustee by the Company for the redemption of such Securities, is not less than the Redemption Price, of such Securities. Notwithstanding anything to the contrary contained in this Article 3, the obligation of the Company to pay the Redemption Price of such Securities, shall be deemed to be satisfied and discharged to the extent such amount is so paid by such purchasers. If such an agreement is entered into, any Securities not duly surrendered for conversion by the Holders thereof may, at the option of the Company, be deemed, to the fullest extent permitted by law, acquired by such purchasers from such Holders and (notwithstanding anything to the contrary contained in Article 11) surrendered by such purchasers for conversion, all as of immediately prior to the close of business on the Redemption Date, subject to payment of the above amount as aforesaid. The Trustee shall hold and pay to the Holders whose Securities are selected for redemption any such amount paid to it for purchase and conversion in the same manner as it would moneys deposited with it by the Company for the redemption of Securities. Without the Trustee's prior written consent, no arrangement between the Company and such purchasers for the purchase and conversion of any Securities shall increase or otherwise affect any of the powers, duties, responsibilities or obligations of the

Trustee as set forth in this Indenture, and the Company agrees to indemnify the Trustee from, and hold it harmless against, any loss, liability or expense arising out of or in connection with any such arrangement for the purchase and conversion of any Securities between the Company and such purchasers, including the costs and expenses incurred by the Trustee in the defense of any claim or liability arising out of or in connection with the exercise or performance of any of its powers, duties, responsibilities or obligations under this Indenture.

SECTION 3.08. Purchase of Securities at Option of the Holder.

(a) General. Securities shall be purchased by the Company pursuant to paragraph 6 of the Securities as of February 16, 2004, February 16, 2009 and February 16, 2014 (each, a "Purchase Date"), at the purchase price specified therein (each, a "Purchase Price"), at the option of the Holder thereof, upon:

(1) delivery to the Paying Agent, by the Holder of a written notice of purchase (a "Purchase Notice") at any time from the opening of business on the date that is 20 Business Days prior to a Purchase Date until the close of business on such Purchase Date stating:

(A) the certificate number of the Security which the Holder will deliver to be purchased by the Company,

(B) the portion of the Principal Amount at Maturity of the Security which the Holder will deliver to be purchased, which portion must be $1,000 or an integral multiple thereof,

(C) that such Security shall be purchased as of the Purchase Date pursuant to the terms and conditions specified in paragraph 6 of the Securities and in this Indenture, and

(D) in the event the Company elects, pursuant to Section 3.08(b), to pay the Purchase Price to be paid as of such Purchase Date, in whole or in part, in shares of Common Stock but such portion of the Purchase Price shall ultimately be payable to such Holder entirely in cash because any of the conditions to payment of the Purchase Price (or portion thereof) in Common Stock is not satisfied prior to the close of business on such Purchase Date, as set forth in Section 3.08(d), whether such Holder elects (i) to withdraw such Purchase Notice as to some or all of the Securities to which such Purchase Notice relates (stating the Principal Amount at Maturity and certificate numbers of the Securities as to which such withdrawal shall relate), or (ii) to receive cash in respect of the entire Purchase Price for all Securities (or portions thereof) to which such Purchase Notice relates; and

(2) delivery of such Security to the Paying Agent prior to, on or after the Purchase Date (together with all necessary endorsements) at the offices of the Paying Agent, such delivery being a condition to receipt by the Holder of the Purchase Price therefor; provided, however, that such Purchase Price shall be so paid pursuant to this Section 3.08 only if the Security so delivered to the Paying Agent shall conform in all respects to the description thereof in the related Purchase Notice.

If a Holder, in such Holder's Purchase Notice and in any written notice of withdrawal delivered by such Holder pursuant to the terms of Section 3.10, fails to indicate such Holder's choice with respect to the election set forth in clause (D) of Section 3.08(a)(1), such Holder shall be deemed to have elected to receive cash in respect of the Purchase Price for all Securities subject to such Purchase Notice in the circumstances set forth in such clause (D).

The Company shall purchase from the Holder thereof, pursuant to this Section 3.08, a portion of a Security if the Principal Amount at Maturity of such portion is $1,000 or an integral multiple of $1,000. Provisions of this Indenture that apply to the purchase of all of a Security also apply to the purchase of such portion of such Security.

Any purchase by the Company contemplated pursuant to the provisions of this Section 3.08 shall be consummated by the delivery of the consideration to be received by the Holder to the Trustee or the Paying Agent in accordance with Sections 3.11 after the time of delivery of the Security.

Notwithstanding anything herein to the contrary, any Holder delivering to the Paying Agent the Purchase Notice contemplated by this Section 3.08(a) shall have the right to withdraw such Purchase Notice at any time prior to the close of business on the Purchase Date by delivery of a written notice of withdrawal to the Paying Agent in accordance with Section 3.10.

The Paying Agent shall promptly notify the Company of the receipt by it of any Purchase Notice or written notice of withdrawal thereof.

(b) Company's Right to Elect Manner of Payment of Purchase Price. The Securities to be purchased pursuant to Section 3.08(a) may be paid for, at the election of the Company, in U.S. legal tender ("cash") or Common Stock, or in any combination of cash and Common Stock, subject to the conditions set forth in Sections 3.08(c) and (d). The Company shall designate, in the Company Notice delivered pursuant to Section 3.08(e), whether the Company will purchase the Securities for cash or Common Stock, or, if a combination thereof, the percentages of the Purchase Price of Securities in respect of which it will pay in cash or Common Stock; provided that the Company will pay cash for fractional interests in Common Stock. For purposes of determining the existence of potential fractional interests, all Securities subject to purchase by the Company held by a Holder shall be considered together (no matter

how many separate certificates are to be presented). Each Holder whose Securities are purchased pursuant to this Section 3.08 shall receive the same percentage of cash or Common Stock in payment of the Purchase Price for such Securities, except (i) as provided in Section 3.08(d) with regard to the payment of cash in lieu of fractional shares of Common Stock and (ii) in the event that the Company is unable to purchase the Securities of a Holder or Holders for Common Stock because any necessary qualifications or registrations of the Common Stock under applicable state securities laws cannot be obtained, the Company may purchase the Securities of such Holder or Holders for cash. The Company may not change its election with respect to the consideration (or components or percentages of components thereof) to be paid once the Company has given its Company Notice to Securityholders except pursuant to this Section 3.08(b) or pursuant to Section 3.08(d) in the event of a failure to satisfy, prior to the close of business on the Purchase Date, any condition to the payment of the Purchase Price, in whole or in part, in Common Stock.

At least three Business Days before the Company Notice Date, the Company shall deliver an Officers' Certificate to the Trustee specifying:

(i) the manner of payment selected by the Company,

(ii) the information required by Section 3.08(e),

(iii) if the Company elects to pay the Purchase Price, or a specified percentage thereof, in Common Stock, that the conditions to such manner of payment set forth in Section 3.08(d) have been or will be complied with, and

(iv) whether the Company desires the Trustee to give the Company Notice required by Section 3.08(e).

(c) Purchase with Cash. On each Purchase Date, at the option of the Company, the Purchase Price of Securities in respect of which a Purchase Notice pursuant to Section 3.08(a) has been given, or a specified percentage thereof, may be paid by the Company with cash equal to the aggregate Purchase Price of such Securities. If the Company elects to purchase Securities with cash, the Company Notice, as provided in Section 3.08(e), shall be sent to Holders (and to beneficial owners as required by applicable law) not less than 20 Business Days prior to such Purchase Date (the "Company Notice Date").

(d) Payment by Issuance of Common Stock. On each Purchase Date, at the option of the Company, the Purchase Price of Securities in respect of which a Purchase Notice pursuant to Section 3.08(a) has been given, or a specified percentage thereof, may be paid by the Company by the issuance of a number of shares of Common Stock equal to the quotient obtained by dividing (i) the amount of cash to which the Securityholders would have been entitled had the Company elected to pay all or such specified percentage, as the case may be, of the Purchase

Price of such Securities in cash by (ii) the Market Price of a share of Common Stock, subject to the next succeeding paragraph.

The Company will not issue a fractional share of Common Stock in payment of the Purchase Price. Instead the Company will pay cash for the current market value of the fractional share. The current market value of a fraction of a share shall be determined by multiplying the Market Price by such fraction and rounding the product to the nearest whole cent. It is understood that if a Holder elects to have more than one Security purchased, the number of shares of Common Stock shall be based on the aggregate amount of Securities to be purchased.

If the Company elects to purchase the Securities by the issuance of shares of Common Stock, the Company Notice, as provided in Section 3.08(e), shall be sent to the Holders (and to beneficial owners as required by applicable law) not later than the Company Notice Date.

The Company's right to exercise its election to purchase the Securities pursuant to Section 3.08 through the issuance of shares of Common Stock shall be conditioned upon:

(i) the Company's not having given its Company Notice of an election to pay entirely in cash and its giving of timely Company Notice of election to purchase all or a specified percentage of the Securities with Common Stock as provided herein;

(ii) the registration of the shares of Common Stock to be issued in respect of the payment of the Purchase Price under the Securities Act of 1933, as amended (the "Securities Act"), or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in each case, if required;

(iii) any necessary qualification or registration under applicable state securities laws or the availability of an exemption from such qualification and registration; and

(iv) the receipt by the Trustee, at least five Business Days prior to the Purchase Date, of an Officers' Certificate and an Opinion of Counsel each stating that (A) the terms of the issuance of the Common Stock are in conformity with this Indenture and (B) the shares of Common Stock to be issued by the Company in payment of the Purchase Price in respect of Securities have been duly authorized and, when issued and delivered pursuant to the terms of this Indenture in payment of the Purchase Price in respect of the Securities, will be validly issued, fully paid and non-assessable and, to the best of such counsel's knowledge, free from preemptive rights, and, in the case of such Officers' Certificate, stating that conditions (i), (ii) and (iii) above and the condition set forth in the second succeeding sentence have been satisfied and, in the case of such Opinion of Counsel, stating that conditions (ii) and (iii) above has been satisfied.

Such Officers' Certificate shall also set forth the number of shares of Common Stock to be issued for each $1,000 Principal Amount at Maturity of Securities and the Sale Price of a share of Common Stock on each trading day during the period commencing on the first trading day of the period during which the Market Price is calculated and ending on the applicable Purchase Date. The Company may pay the Purchase Price (or any portion thereof) in Common Stock only if the information necessary to calculate the Market Price is published in a daily newspaper of national circulation. If the foregoing conditions are not satisfied with respect to a Holder or Holders prior to the close of business on the Purchase Date and the Company has elected to purchase the Securities pursuant to this Section 3.08 through the issuance of shares of Common Stock, the Company shall pay the entire Purchase Price of the Securities of such Holder or Holders in cash.

The "Market Price" means the average of the Sale Prices of the Common Stock for the five trading day period ending on (if the third Business Day prior to the applicable Purchase Date is a trading day, or if not, then on the last trading day prior to) the third Business Day prior to the applicable Purchase Date, appropriately adjusted to take into account the occurrence, during the period commencing on the first of such trading days during such five trading day period and ending on such Purchase Date, of any event described in Section 11.06, 11.07 or 11.08; subject, however, to the conditions set forth in Sections 11.09 and 11.10.

The "Sale Price" of the Common Stock on any date means the closing per share sale price (or, if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and average ask prices) on such date as reported in the composite transactions for the principal United States securities exchange on which the Common Stock is traded or, if the Common Stock is not listed on a United States national or regional securities exchange, as reported by the National Association of Securities Dealers Automated Quotation System.

(e) Notice of Election. The Company's notice of election to purchase with cash or Common Stock or any combination thereof shall be sent to the Holders (and to beneficial owners as required by applicable law) in the manner provided in Section 13.02 at the time specified in Section 3.08(c) or (d), as applicable (the "Company Notice"). Such Company Notice shall state the manner of payment elected and shall contain the following information:

In the event the Company has elected to pay the Purchase Price (or a specified percentage thereof) with Common Stock, the Company Notice shall:

(1) state that each Holder will receive Common Stock with a Market Price determined as of a specified date prior to the Purchase Date equal to such specified percentage of the Purchase Price of the Securities held by such Holder (except any cash amount to be paid in lieu of fractional shares);

(2) set forth the method of calculating the Market Price of the Common Stock; and

(3) state that because the Market Price of Common Stock will be determined prior to the Purchase Date, Holders will bear the market risk with respect to the value of the Common Stock to be received from the date such Market Price is determined to the Purchase Date.

In any case, each Company Notice shall include a form of Purchase Notice to be completed by a Securityholder and shall state:

(i) the Purchase Price and the Conversion Rate;

(ii) the name and address of the Paying Agent and the Conversion Agent;

(iii) that Securities as to which a Purchase Notice has been given may be converted pursuant to Article 11 hereof only if the applicable Purchase Notice has been withdrawn in accordance with the terms of this Indenture;

(iv) that Securities must be surrendered to the Paying Agent to collect payment;

(v) that the Purchase Price for any security as to which a Purchase Notice has been given and not withdrawn will be paid promptly following the later of the Purchase Date and the time of surrender of such Security as of described in (iv);

(vi) the procedures the Holder must follow to exercise rights under Section 3.08 and a brief description of those rights;

(vii) briefly, the conversion rights of the Securities; and

(viii) the procedures for withdrawing a Purchase Notice (including, without limitation, for a conditional withdrawal pursuant to the terms of Section 3.08(a)(1)(D) or Section 3.10).

At the Company's request, the Trustee shall give such Company Notice in the Company's name and at the Company's expense; provided, however, that, in all cases, the text of such Company Notice shall be prepared by the Company.

Upon determination of the actual number of shares of Common Stock to be issued for each $1,000 Principal Amount at Maturity of Securities, the Company will publish such determination in a daily newspaper of national circulation.

(f) Covenants of the Company. All shares of Common Stock delivered upon purchase of the Securities shall be newly issued shares or treasury shares, shall be duly authorized, validly issued, fully paid and nonassessable and shall be free from preemptive rights and free of any lien or adverse claim.

The Company shall use its best efforts to list or cause to have quoted any shares of Common Stock to be issued to purchase Securities on each national securities exchange or over-the-counter or other domestic market on which the Common Stock is then listed or quoted.

(g) Procedure upon Purchase. The Company shall deposit cash (in respect of a cash purchase under Section 3.08(c) or for fractional interests, as applicable) or shares of Common Stock, or a combination thereof, as applicable, at the time and in the manner as provided in Section 3.11, sufficient to pay the aggregate Purchase Price of all Securities to be purchased pursuant to this Section 3.08. As soon as practicable after the Purchase Date, the Company shall deliver to each Holder entitled to receive Common Stock through the Paying Agent, a certificate for the number of full shares of Common Stock issuable in payment of the Purchase Price and cash in lieu of any fractional interests. The person in whose name the certificate for Common Stock is registered shall be treated as a holder of record of shares of Common Stock on the Business Day following the Purchase Date. Subject to Section 3.08(d), no payment or adjustment will be made for dividends on the Common Stock the record date for which occurred on or prior to the Purchase Date.

(h) Taxes. If a Holder of a Security is paid in Common Stock, the Company shall pay any documentary, stamp or similar issue or transfer tax due on such issue of shares of Common Stock. However, the Holder shall pay any such tax which is due because the Holder requests the shares of Common Stock to be issued in a name other than the Holder's name. The Paying Agent may refuse to deliver the certificates representing the Common Stock being issued in a name other than the Holder's name until the Paying Agent receives a sum sufficient to pay any tax which will be due because the shares of Common Stock are to be issued in a name other than the Holder's name. Nothing herein shall preclude any income tax withholding required by law or regulations.

SECTION 3.09. Purchase of Securities at Option of the Holder upon Change in Control. (a) If on or prior to February 16, 2004 there shall have occurred a Change in Control, Securities shall be purchased by the Company, at the option of the Holder thereof, at the purchase price specified in paragraph 6 of the Securities (the "Change in Control Purchase Price"), as of the date that is 35 Business Days after the occurrence of the Change in Control (the "Change in Control Purchase Date"), subject to satisfaction by or on behalf of the Holder of the requirements set forth in Section 3.09(c).

A "Change in Control" shall be deemed to have occurred at such time as either of the following events shall occur:

(i) There shall be consummated any consolidation or merger of the Company pursuant to which the Common Stock would be converted into cash, securities or other property, in each case other than a consolidation or merger of the Company in which the holders of the Common Stock immediately prior to the consolidation or merger have, directly or indirectly, at least a majority of the total voting power in the aggregate of all classes of Capital Stock of the continuing or surviving corporation immediately after such consolidation or merger; or

(ii) There is a report filed on Schedule 13D or 14D-1 (or any successor schedule, form or report) pursuant to the Exchange Act, disclosing that any person (for the purposes of this Section 3.09 only, as the term "person" is used in Section 13(d)(3) or Section 14(d)(2) of the Exchange Act) has become the beneficial owner (as the term "beneficial owner" is defined under Rule 13d-3 or any successor rule or regulation promulgated under the Exchange Act) of 50% or more of the voting power of the Common Stock then outstanding; provided, however, that a person shall not be deemed beneficial owner of, or to own beneficially, (A) any securities tendered pursuant to a tender or exchange offer made by or on behalf of such person or any of such person's Affiliates or Associates until such tendered securities are accepted for purchase or exchange thereunder, or (B) any securities if such beneficial ownership (1) arises solely as a result of a revocable proxy delivered in response to a proxy or consent solicitation made pursuant to the applicable rules and regulations under the Exchange Act, and (2) is not also then reportable on Schedule 13D (or any successor schedule) under the Exchange Act.

Notwithstanding the foregoing provisions of this Section 3.09, a Change in Control shall not be deemed to have occurred by virtue of the Company, any Subsidiary, any employee stock ownership plan or any other employee benefit plan of the Company or any Subsidiary, or any person holding Common Stock for or pursuant to the terms of any such employee benefit plan, filing or becoming obligated to file a report under or in response to Schedule 13D or Schedule 14D-1 (or any successor schedule, form or report) under the Exchange Act disclosing beneficial ownership by it of shares of Common Stock, whether in excess of 50% or otherwise.

"Associate" shall have the meaning ascribed to such term in Rule 12b-2 of the General Rules and Regulations under the Exchange Act, as in effect on the date hereof.

(b) Within 15 Business Days after the occurrence of a Change in Control, the Company shall mail a written notice of Change in Control by first-class mail to the Trustee and to each Holder (and to beneficial owners as required by applicable law). The notice shall include

a form of Change in Control Purchase Notice to be completed by the Securityholder and shall state:

(1) briefly, the events causing a Change in Control and the date of such Change in Control;

(2) the date by which the Change in Control Purchase Notice pursuant to this Section 3.09 must be given;

(3) the Change in Control Purchase Date;

(4) the Change in Control Purchase Price;

(5) the name and address of the Paying Agent and the Conversion Agent;

(6) the Conversion Rate and any adjustments thereto;

(7) that Securities as to which a Change in Control Purchase Notice has been given may be converted pursuant to Article 11 hereof only if the Change in Control Purchase Notice has been withdrawn in accordance with the terms of this Indenture;

(8) that Securities must be surrendered to the Paying Agent to collect payment;

(9) that the Change in Control Purchase Price for any Security as to which a Change in Control Purchase Notice has been duly given and not withdrawn will be paid promptly following the later of the Change in Control Purchase Date and the time of surrender of such Security as described in (8);

(10) briefly, the procedures the Holder must follow to exercise rights under this Section 3.09;

(11) briefly, the conversion rights of the Securities; and

(12) the procedures for withdrawing a Change in Control Purchase Notice.

(c) A Holder may exercise its rights specified in Section 3.09(a) upon delivery of a written notice of purchase (a "Change in Control Purchase Notice") to the Paying Agent at any time prior to the close of business on the Change in Control Purchase Date, stating:

(1) the certificate number of the Security which the Holder will deliver to be purchased;

(2) the portion of the Principal Amount at Maturity of the Security which the Holder will deliver to be purchased, which portion must be $1,000 or an integral multiple thereof; and

(3) that such Security shall be purchased pursuant to the terms and conditions specified in paragraph 6 of the Securities.

The delivery of such Security to the Paying Agent prior to, on or after the Change in Control Purchase Date (together with all necessary endorsements) at the offices of the Paying Agent shall be a condition to the receipt by the Holder of the Change in Control Purchase Price therefor; provided, however, that such Change in Control Purchase Price shall be so paid pursuant to this Section 3.09 only if the Security so delivered to the Paying Agent shall conform in all respects to the description thereof set forth in the related Change in Control Purchase Notice.

The Company shall purchase from the Holder thereof, pursuant to this Section 3.09, a portion of a Security if the Principal Amount at Maturity of such portion is $1,000 or an integral multiple of $1,000. Provisions of this Indenture that apply to the purchase of all of a Security also apply to the purchase of such portion of such Security.

Any purchase by the Company contemplated pursuant to the provisions of this Section 3.09 shall be consummated by the delivery of the consideration to be received by the Holder to the Trustee or the Paying Agent in accordance with Section 3.11 after the time of delivery of the Security to the Paying Agent in accordance with this Section 3.09.

Notwithstanding anything herein to the contrary, any Holder delivering to the Paying Agent the Change in Control Purchase Notice contemplated by this Section 3.09(c) shall have the right to withdraw such Change in Control Purchase Notice at any time prior to the close of business on the Change in Control Purchase Date by delivery of a written notice of withdrawal to the Paying Agent in accordance with Section 3.10.

The Paying Agent shall promptly notify the Company of the receipt by it of any Change in Control Purchase Notice or written withdrawal thereof.

SECTION 3.10. Effect of Purchase Notice or Change in Control Purchase Notice. Upon receipt by the Paying Agent of the Purchase Notice or Change in Control Purchase Notice specified in Section 3.08(a) or Section 3.09(c), as applicable, the Holder of the Security in respect of which such Purchase Notice or Change in Control Purchase Notice, as the case may be, was given shall (unless such Purchase Notice or Change in Control Purchase Notice is withdrawn as specified in the following two paragraphs) thereafter be entitled to receive solely the Purchase Price or Change in Control Purchase Price, as the case may be, with respect to such Security. Such Purchase Price or Change in Control Purchase Price shall be paid to such Holder,

subject to receipts of funds and/or securities by the Paying Agent, promptly following the later of (x) the Purchase Date or the Change in Control Purchase Date, as the case may be, with respect to such Security (provided the conditions in Section 3.08(a) or Section 3.09(c), as applicable, have been satisfied) and (y) the time of delivery of such Security to the Paying Agent by the Holder thereof in the manner required by Section 3.08(a) or Section 3.09(c), as applicable. Securities in respect of which a Purchase Notice or Change in Control Purchase Notice, as the case may be, has been given by the Holder thereof may not be converted pursuant to Article 11 hereof on or after the date of the delivery of such Purchase Notice or Change in Control Purchase Notice, as the case may be, unless such Purchase Notice or Change in Control Purchase Notice, as the case may be, has first been validly withdrawn as specified in the following two paragraphs.

A Purchase Notice or Change in Control Purchase Notice, as the case may be, may be withdrawn by means of a written notice of withdrawal delivered to the office of the Paying Agent in accordance with the Purchase Notice or Change in Control Purchase Notice, as the case may be, at any time prior to the close of business on the Purchase Date or the Change in Control Purchase Date, as the case may be, specifying:

(1) the certificate number of the Security in respect of which such notice of withdrawal is being submitted,

(2) the Principal Amount at Maturity of the Security with respect to which such notice of withdrawal is being submitted, and

(3) the Principal Amount at Maturity, if any, of such Security which remains subject to the original Purchase Notice or Change in Control Purchase Notice, as the case may be, and which has been or will be delivered for purchase by the Company.

A written notice of withdrawal of a Purchase Notice may be in the form set forth in the preceding paragraph or may be in the form of (i) a conditional withdrawal contained in a Purchase Notice pursuant to the terms of Section 3.08(a)(1)(D) or (ii) a conditional withdrawal containing the information set forth in Section 3.08(a)(1)(D) and the preceding paragraph and contained in a written notice of withdrawal delivered to the Paying Agent as set forth in the preceding paragraph.

There shall be no purchase of any Securities pursuant to Section 3.08 (other than through the issuance of Common Stock in payment of the Purchase Price, including cash in lieu of fractional shares) or 3.09 if there has occurred (prior to, on or after, as the case may be, the giving, by the Holders of such Securities, of the required Purchase Notice or Change in Control Purchase Notice, as the case may be) and is continuing an Event of Default (other than a default in the payment of the Purchase Price or Change in Control Purchase Price, as the case may be, with respect to such Securities). The Paying Agent will promptly return to the respective Holders thereof any Securities (x) with respect to which a Purchase Notice or Change in Control Purchase

Notice, as the case may be, has been withdrawn in compliance with this Indenture, or (y) held by it during the continuance of an Event of Default (other than a default in the payment of the Purchase Price or Change in Control Purchase Price, as the case may be, with respect to such Securities) in which case, upon such return, the Purchase Notice or Change in Control Purchase Notice with respect thereto shall be deemed to have been withdrawn.

SECTION 3.11. Deposit of Purchase Price or Change in Control Purchase Price. Prior to 1:00 p.m. (local time in The City of New York) on the Business Day following the Purchase Date or the Change in Control Purchase Date, as the case may be, the Company shall deposit with the Trustee or with the Paying Agent (or, if the Company or a Subsidiary or an Affiliate of either of them is acting as the Paying Agent, shall segregate and hold in trust as provided in Section 2.04) an amount of money (in immediately available funds if deposited on such Business Day) or Common Stock, if permitted hereunder, sufficient to pay the aggregate Purchase Price or Change in Control Purchase Price, as the case may be, of all the Securities or portions thereof which are to be purchased as of the Purchase Date or Change in Control Purchase Date, as the case may be.

SECTION 3.12. Securities Purchased in Part. Any Security which is to be purchased only in part shall be surrendered at the office of the Paying Agent (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or such Holder's attorney duly authorized in writing) and the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge, a new Security or Securities, of any authorized denomination as requested by such Holder in aggregate Principal Amount at Maturity equal to, and in exchange for, the portion of the Principal Amount at Maturity of the Security so surrendered which is not purchased.

SECTION 3.13. Covenant to Comply with Securities Laws upon Purchase of Securities. In connection with any offer to purchase or purchase of Securities under Section 3.08 or 3.09 hereof (provided that such offer or purchase constitutes an "issuer tender offer" for purposes of Rule 13e-4 (which term, as used herein, includes any successor provision thereto) under the Exchange Act at the time of such offer or purchase), the Company shall (i) comply with Rule 13e-4 and Rule 14e-1 under the Exchange Act, (ii) file the related Schedule 13E-4 (or any successor schedule, form or report) under the Exchange Act, and (iii) otherwise comply with all Federal and state securities laws so as to permit the rights and obligations under Sections 3.08 and 3.09 to be exercised in the time and in the manner specified in Sections 3.08 and 3.09.

SECTION 3.14. Repayment to the Company. The Trustee and the Paying Agent shall return to the Company any cash or shares of Common Stock that remain unclaimed as provided in paragraph 13 of the Securities, together with interest or dividends, if any, thereon (subject to the provisions of Section 7.01(f)), held by them for the payment of the Purchase Price or Change in Control Purchase Price, as the case may be; provided, however, that to the extent

that the aggregate amount of cash or shares of Common Stock deposited by the Company pursuant to Section 3.11 exceeds the aggregate Purchase Price or Change in Control Purchase Price, as the case may be, of the Securities or portions thereof which the Company is obligated to purchase as of the Purchase Date or Change in Control Purchase Date, as the case may be, then promptly after the Business Day following the Purchase Date or Change in Control Purchase Date, as the case may be, the Trustee shall return any such excess to the Company together with interest or dividends, if any, thereon (subject to the provisions of Section 7.01(f)).

ARTICLE 4

COVENANTS

SECTION 4.01. Payment of Securities. The Company shall promptly make all payments in respect of the Securities on the dates and in the manner provided in the Securities or pursuant to this Indenture. Principal Amount at Maturity, Restated Principal Amount, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price and interest, if any, shall be considered paid on the applicable date due if on such date (or, in the case of a Purchase Price or Change in Control Purchase Price, on the Business Day following the applicable Purchase Date or Change in Control Purchase Date, as the case may be) the Trustee or the Paying Agent holds, in accordance with this Indenture, money or securities, if permitted hereunder, sufficient to pay all such amounts then due.

The Company shall, to the extent permitted by law, pay interest on overdue amounts at the rate per annum set forth in paragraph 1 of the Securities, compounded semiannually, which interest shall accrue from the date such overdue amount was originally due to the date payment of such amount, including interest thereon, has been made or duly provided for. All such interest shall be payable on demand. The accrual of such interest on overdue amounts shall be in lieu of, and not in addition to, the continued accrual of Original Issue Discount.

SECTION 4.02. SEC and Other Reports. The Company shall file with the Trustee, within 15 days after it files such annual and quarterly reports, information, documents and other reports with the SEC, copies of its annual report and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which the Company in required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. In the event the Company is at any time no longer subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, it shall continue to provide the Trustee with reports containing substantially the same information as would have been required to be filed with the SEC had the Company continued to have been subject to such reporting requirements. In such event, such reports shall be provided at the times the Company would have been required to provide reports had it continued to have been subject to such

reporting requirements. The Company also shall comply with the other provisions of TIA Section 314(a).

SECTION 4.03. Compliance Certificate. The Company shall deliver to the Trustee within 120 days after the end of each fiscal year of the Company (beginning with the fiscal year ending on December 31, 1999) an Officers' Certificate stating whether or not to the best knowledge of the signers thereof the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge.

SECTION 4.04. Further Instruments and Acts. Upon request of the Trustee, the Company will execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purposes of this Indenture.

SECTION 4.05. Maintenance of Office or Agency. The Company will maintain in the Borough of Manhattan, The City of New York, an office or agency of the Trustee, Registrar, Paying Agent and Conversion Agent where Securities may be presented or surrendered for payment, where Securities may be surrendered for registration of transfer, exchange, purchase, redemption or conversion and where notices and demands to or upon the Company in respect of the Securities and this Indenture may be served. The office of Chase Manhattan Bank and Trust Company, National Association, located at 55 Water Street, Room 234, North Building, New York, New York (Attention: Corporate Trust Administration - IDEC Pharmaceuticals Corporation, Liquid Yield Option Notes due 2019 (Zero Coupon-Subordinated)), shall initially be such office or agency for all of the aforesaid purposes. The Company shall give prompt written notice to the Trustee of the location, and of any change in the location, of any such office or agency (other than a change in the location of the office of the Trustee). If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the address of the Trustee set forth in Section 13.02.

The Company may also from time to time designate one or more other offices or agencies where the Securities may be presented or surrendered for any or all such purposes and may from time to time rescind such designation; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in the Borough of Manhattan, The City of New York, for such purposes.

SECTION 4.06. Delivery of Certain Information. At any time when the Company is not subject to Section 13 or 15(d) of the Exchange Act, upon the request of a holder or any beneficial holder of Securities or shares of Common Stock issued upon conversion

thereof, the Company will promptly furnish or cause to be furnished Rule 144A Information (as defined below) to such Holder or any beneficial holder of Securities or holder of shares of Common Stock issued upon conversion of Securities, or to a prospective purchaser of any such security designated by any such holder, as the case may be, to the extent required to permit compliance by such Holder or holder with Rule 144A under the Securities Act in connection with the resale of any such security. "Rule 144A Information" shall be such information as is specified pursuant to Rule 144A(d)(4) under the Securities Act.

ARTICLE 5

SUCCESSOR CORPORATION

SECTION 5.01. When Company May Merge or Transfer Assets. The Company shall not consolidate with or merge with or into any other person or convey, transfer or lease its properties and assets substantially as an entirety to any person, unless:

(a) either (1) the Company shall be the continuing corporation or (2) the person (if other than the Company) formed by such consolidation or into which the Company is merged or the person which acquires by conveyance, transfer or lease the properties and assets of the Company substantially as an entirety (i) shall be organized and validly existing under the laws of the United States or any State thereof or the District of Columbia and (ii) shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, all of the obligations of the Company under the Securities and this Indenture;

(b) immediately after giving effect to such transaction, no Default shall have occurred and be continuing; and

(c) the Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture, comply with this Article 5 and that all conditions precedent herein provided for relating to such transaction have been satisfied.

For purposes of the foregoing, the transfer (by lease, assignment, sale or otherwise) of the properties and assets of one or more Subsidiaries (other than to the Company or another Subsidiary), which, if such assets were owned by the Company, would constitute all or substantially all of the properties and assets of the Company, shall be deemed to be the transfer of all or substantially all of the properties and assets of the Company.

The successor person formed by such consolidation or into which the Company is merged or the successor person to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor had been named as the Company herein; and thereafter, except in the case of a lease and obligations the Company may have under a supplemental indenture pursuant to Section 11.14, the Company shall be discharged from all obligations and covenants under this Indenture and the Securities. Subject to Section 9.06, the Company, the Trustee and the successor person shall enter into a supplemental indenture to evidence the succession and substitution of such successor person and such discharge and release of the Company.

ARTICLE 6

DEFAULTS AND REMEDIES

SECTION 6.01. Events of Default. An "Event of Default" occurs if:

(1) after exercise of its option pursuant to Section 10.01 hereof following a Tax Event, the Company defaults in the payment of interest upon any Security when such interest becomes due and payable, and such default continues for a period of 30 days;

(2) the Company defaults in the payment of the Principal Amount at Maturity (or, if the Securities have been converted to semiannual coupon notes following a Tax Event pursuant to Article 10, the Restated Principal Amount), Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price or Change in Control Purchase Price on any Security when the same becomes due and payable at its Stated Maturity, upon redemption, upon declaration, when due for purchase by the Company or otherwise;

(3) the Company fails to comply with any of its agreements in the Securities or this Indenture (other than those referred to in clauses (1) and (2) above) and such failure continues for 60 days after receipt by the Company of a Notice of Default;

(4) the Company defaults (after expiration of any applicable grace periods) under any bond, debenture, note or other evidence of indebtedness for money borrowed of the Company having an aggregate outstanding principal amount of in excess of the greater of (a) $10 million or (b) 5% of Consolidated Net Assets, which default shall have resulted in such bond, debenture, note or indebtedness being accelerated, without such bond, debenture, note or indebtedness being discharged or such acceleration having been cured, waived, rescinded or annulled within 15 days after receipt by the Company of a Notice of Default; provided, however, that if any such failure or acceleration referred to

in (a) or (b) above shall cease or be cured, waived, rescinded or annulled, then the Event of Default by reason thereof shall be deemed not to have occurred;

(5) the Company pursuant to or under or within the meaning of any Bankruptcy Law:

(A) commences a voluntary case or proceeding;

(B) consents to the entry of an order for relief against it in an involuntary case or proceeding or the commencement of any case against it;

(C) consents to the appointment of a Custodian of it or for an substantial part of its property;

(D) makes a general assignment for the benefit of its creditors;

(E) files a petition in bankruptcy or answer or consent seeking reorganization or relief; or

(F) consents to the filing of such petition or the appointment of or taking possession by a Custodian;

(6) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(A) is for relief against the Company in an involuntary case or proceeding, or adjudicates the Company insolvent or bankrupt;

(B) appoints a Custodian of the Company or for any substantial part of its property; or

(C) orders the winding up or liquidation of the Company;

and the order or decree remains unstayed and in effect for 60 days; or

(7) the Company fails to deliver shares of Common Stock or cash in lieu thereof (together with cash in lieu of fractional shares) when such Common Stock or cash (or cash in lieu of fractional shares) is required to be delivered following conversion of a Security and continuance of such Default for 10 days.

"Bankruptcy Law" means Title 11, United States Code, or any similar Federal or state law for the relief of debtors.

"Custodian" means any receiver, trustee, assignee, liquidator, custodian or similar official under any Bankruptcy Law.

A Default under clause (3) or clause (4) above is not an Event of Default until the Trustee notifies the Company, or the Holders of at least 25% in aggregate Principal Amount at Maturity of the Securities at the time outstanding notify the Company and the Trustee, of the Default and the Company does not cure such Default (and such Default is not waived) within the time specified in clause (3) or clause (4) above after actual receipt of such notice. Any such notice must specify the Default, demand that it be remedied and state that such notice is a "Notice of Default".

The Company shall deliver to the Trustee, within 30 days after it becomes aware of the occurrence thereof, written notice of any event which with the giving of notice or the lapse of time, or both, would become an Event of Default under clause (3) or clause (4) above, its status and what action the Company is taking or proposes to take with respect thereto.

SECTION 6.02. Acceleration. If an Event of Default (other than an Event of Default specified in Section 6.01(5) or (6)) occurs and is continuing, the Trustee by notice to the Company, or the Holders of at least 25% in aggregate Principal Amount at Maturity of the Securities at the time outstanding by notice to the Company and the Trustee, may declare the Issue Price plus accrued Original Issue Discount (or, if the Securities have been converted to semiannual coupon notes following a Tax Event pursuant to Article 10, the Restated Principal Amount plus accrued and unpaid interest, if any) through the date of declaration on all the Securities to be immediately due and payable. Upon such a declaration, such Issue Price plus accrued Original Issue Discount (or, if the Securities have been converted to semiannual coupon notes following a Tax Event pursuant to Article 10, the Restated Principal Amount plus accrued and unpaid interest, if any) shall be due and payable immediately. If an Event of Default specified in Section 6.01(5) or (6) occurs and is continuing, the Issue Price plus accrued Original Issue Discount (or, if the Securities have been converted to semiannual coupon notes following a Tax Event pursuant to Article 10, the Restated Principal Amount plus accrued and unpaid interest, if any) on all the Securities shall become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Securityholders. The Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding, by notice to the Trustee (and without notice to any other Securityholder) may rescind an acceleration and its consequences if the rescission would not conflict with any judgment or decree and if all existing Events of Default have been cured or waived except nonpayment of the Issue Price plus accrued Original Issue Discount that have become due solely as a result of acceleration and if all amounts due to the Trustee under Section 7.07 have been paid. No such rescission shall affect any subsequent Default or impair any right consequent thereto.

SECTION 6.03. Other Remedies. If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of the Issue Price

plus accrued Original Issue Discount on the Securities or to enforce the performance of any provision of the Securities or this Indenture.

The Trustee may maintain a proceeding even if the Trustee does not possess any of the Securities or does not produce any of the Securities in the proceeding. A delay or omission by the Trustee or any Securityholder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of, or acquiescence in, the Event of Default. No remedy is exclusive of any other remedy. All available remedies are cumulative.

SECTION 6.04. Waiver of Past Defaults. The Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding, by notice to the Trustee (and without notice to any other Securityholder), may waive an existing Default and its consequences except (1) an Event of Default described in Section 6.01(1) or (2), (2) a Default in respect of a provision that under Section 9.02 cannot be amended without the consent of each Securityholder affected or (3) a Default which constitutes a failure to convert any Security in accordance with the terms of Article 11. When a Default is waived, it is deemed cured, but no such waiver shall extend to any subsequent or other Default or impair any consequent right. This Section 6.04 shall be in lieu of Section 316(a)1(B) of the TIA and such Section 316(a)l(B) is hereby expressly excluded from this Indenture, as permitted by the TIA.

SECTION 6.05. Control by Majority. The Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or of exercising any trust or power conferred on the Trustee. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture or that the Trustee determines in good faith is unduly prejudicial to the rights of other Securityholders or would involve the Trustee in personal liability unless the Trustee is offered indemnity satisfactory to it. This Section 6.05 shall be in lieu of Section 316(a)1(A) of the TIA and such Section 316(a)l(A) is hereby expressly excluded from this Indenture, as permitted by the TIA.

SECTION 6.06. Limitation on Suits. A Securityholder may not pursue any remedy with respect to this Indenture or the Securities unless:

(1) the Holder gives to the Trustee written notice stating that an Event of Default is continuing;

(2) the Holders of at least 25% in aggregate Principal Amount at Maturity of the Securities at the time outstanding make a written request to the Trustee to pursue the remedy;

(3) such Holder or Holders offer to the Trustee reasonable security or indemnity satisfactory to the Trustee against any loss, liability or expense;

(4) the Trustee does not comply with the request within 60 days after receipt of such notice, request and offer of security or indemnity; and

(5) the Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding do not give the Trustee a direction inconsistent with the request during such 60-day period.

A Securityholder may not use this Indenture to prejudice the rights of any other Securityholder or to obtain a preference or priority over any other Securityholder.

SECTION 6.07. Rights of Holders to Receive Payment. Notwithstanding any other provision of this Indenture, the right of any Holder to receive payment of the Principal Amount at Maturity (or if the Securities have been converted to semiannual coupon notes following a Tax Event pursuant to Article 10, the Restated Principal Amount), Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price or interest, if any, in respect of the Securities held by such Holder, on or after the respective due dates expressed in the Securities or any Redemption Date, and to convert the Securities in accordance with Article 11, or to bring suit for the enforcement of any such payment on or after such respective dates or the right to convert, shall not be impaired or affected adversely without the consent of such Holder.

SECTION 6.08. Collection Suit by Trustee. If an Event of Default described in Section 6.01(1) or (2) occurs and is continuing, the Trustee may recover judgment in its own name and as trustee of an express trust against the Company for the whole amount owing with respect to the Securities and the amounts provided for in Section 7.07.

SECTION 6.09. Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the Principal Amount at Maturity, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price or interest, if any, in respect of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of any such amount) shall be entitled and empowered, by intervention in such proceeding or otherwise,

(a) to file and prove a claim for the whole amount of the Principal Amount at Maturity, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price, or interest, if any, and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee

(including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel or any other amounts due the Trustee under Section 7.07) and of the Holders allowed in such judicial proceeding, and

(b) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay the Trustee any amount due it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.07.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 6.10. Priorities. If the Trustee collects any money pursuant to this Article 6, it shall pay out the money in the following order:

FIRST: to the Trustee for amounts due under Section 7.07;

SECOND: to holders of Senior Indebtedness to the extent required by Article 12;

THIRD: to Securityholders for amounts due and unpaid on the Securities for the Principal Amount at Maturity, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price or interest, if any, as the case may be, ratably, without preference or priority of any kind, according to such amounts due and payable on the Securities; and

FOURTH: the balance, if any, to the Company.

The Trustee may fix a record date and payment date for any payment to Securityholders pursuant to this Section 6.10. At least 15 days before such record date, the Trustee shall mail to each Securityholder and the Company a notice that states the record date, the payment date and the amount to be paid.

SECTION 6.11. Undertaking for Costs. In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, a court in its discretion may require the filing by any party litigant (other

than the Trustee) in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 6.11 does not apply to a suit by the Trustee, a suit by a Holder pursuant to Section 6.07 or a suit by Holders of more than 10% in aggregate Principal Amount at Maturity of the Securities at the time outstanding. This Section 6.11 shall be in lieu of Section 315(e) of the TIA and such Section 315(e) is hereby expressly excluded from this Indenture, as permitted by the TIA.

SECTION 6.12. Waiver of Stay, Extension or Usury Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or any usury or other law wherever enacted, now or at any time hereafter in force, which would prohibit or forgive the Company from paying all or any portion of the Principal Amount at Maturity, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price or Change in Control Purchase Price in respect of Securities, or any interest on such amounts, as contemplated herein, or which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE 7

TRUSTEE

SECTION 7.01. Duties of Trustee. (a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this Indenture and use the same degree of care and skill in its exercise as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(b) Except during the continuance of an Event of Default:

(1) the Trustee need perform only those duties that are specifically set forth in this Indenture and no others; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether or not they conform to the requirements of this Indenture.

This Section 7.01(b) shall be in lieu of Section 315(a) of the TIA and such Section 315(a) is hereby expressly excluded from this Indenture, as permitted by the TIA.

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(1) this paragraph (c) does not limit the effect of paragraph (b) of this Section 7.01;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer unless it is proved that the Trustee was negligent in ascertaining the pertinent facts; and

(3) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it pursuant to Section 6.05.

Subparagraphs (c)(1), (2) and (3) shall be in lieu of Sections 315(d)(1), 315(d)(2) and 315(d)(3) of the TIA and such Sections 315(d)(1), 315(d)(2) and 315(d)(3) are hereby expressly excluded from this Indenture, as permitted by the TIA.

(d) Every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b), (c) and (e) of this Section 7.01.

(e) The Trustee may refuse to perform any duty or exercise any right or power or extend or risk its own funds or otherwise incur any financial liability unless it receives indemnity satisfactory to it against any loss, liability or expense.

(f) Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee (acting in any capacity hereunder) shall be under no liability for interest on any money received by it hereunder unless otherwise agreed in writing with the Company.

SECTION 7.02. Rights of Trustee. Subject to its duties and responsibilities under the TIA,

(a) The Trustee may rely on any document believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.

(b) Before the Trustee acts or refrains from acting, it may require an Officers' Certificate or an Opinion of Counsel. The Trustee shall not be liable for any action it

takes or omits to take in good faith in reliance on such Officers' Certificate or Opinion of Counsel.

(c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care.

(d) Subject to the provisions of Section 7.01(c), the Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers.

(e) The Trustee may consult with counsel selected by it and any advice or Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or suffered or omitted by it hereunder in good faith and in accordance with such advice or Opinion of Counsel.

(f) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Holders, pursuant to the provisions of this Indenture, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which may be incurred therein or thereby.

SECTION 7.03. Individual Rights of Trustee. The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Company or its Affiliates with the same rights it would have if it were not Trustee. Any Paying Agent, Registrar, Conversion Agent or co-registrar may do the same with like rights. However, the Trustee must comply with Sections 7.10 and 7.11.

SECTION 7.04. Trustee's Disclaimer. The Trustee makes no representation as to the validity or adequacy of this Indenture or the Securities, it shall not be accountable for the Company's use or application of the proceeds from the Securities, it shall not be responsible for any statement in the registration statement for the Securities under the Securities Act or in the Indenture or the Securities (other than its certificate of authentication), or the determination as to which beneficial owners are entitled to receive any notices hereunder.

SECTION 7.05. Notice of Defaults. If a Default occurs and if it is known to the Trustee, the Trustee shall give to each Securityholder notice of the Default within 90 days after it occurs unless such Default shall have been cured or waived before the giving of such notice. Except in the case of a Default described in Section 6.01(1) or (2), the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of Securityholders. The second sentence of this Section 7.05 shall be in lieu of the proviso to Section 315(b) of the TIA and such proviso is hereby expressly excluded from this Indenture, as permitted by the TIA. The Trustee shall not be

deemed to have knowledge of a Default unless a Responsible Officer of the Trustee has received written notice of such Default.

SECTION 7.06. Reports by Trustee to Holders. Within 60 days after each May 1 beginning with the May 1 following the date of this Indenture, the Trustee shall mail to each Securityholder a brief report dated as of such May 1 that complies with TIA Section 313(a), if required by such Section 313(a). The Trustee also shall comply with TIA Section 313(b).

A copy of each report at the time of its mailing to Securityholders shall be filed with the SEC and each securities exchange, if any, on which the Securities are listed. The Company agrees to notify the Trustee whenever the Securities become listed on any securities exchange and of any delisting thereof.

SECTION 7.07. Compensation and Indemnity. The Company agrees:

(a) to pay to the Trustee from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited (to the extent permitted by law) by any provision of law in regard to the compensation of a trustee of an express trust);

(b) to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses, advances and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence or bad faith; and

(c) to indemnify the Trustee for, and to hold it harmless against, any loss, damage, claim, liability, cost or expense (including attorney's fees) incurred without negligence or bad faith on its part, arising out of or in connection with the acceptance or administration of this trust, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

To secure the Company's payment obligations in this Section 7.07, the Trustee shall have a lien prior to the Securities on all money or property held or collected by the Trustee, except that held in trust to pay the Principal Amount at Maturity, Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price or interest, if any, as the case may be, on particular Securities.

The Company's payment obligations pursuant to this Section 7.07 shall survive the discharge of this Indenture. When the Trustee incurs expenses after the occurrence of a

Default specified in Section 6.01(5) or (6), the expenses are intended to constitute expenses of administration under any Bankruptcy Law.

SECTION 7.08. Replacement of Trustee. The Trustee may resign by so notifying the Company; provided, however, no such resignation shall be effective until a successor Trustee has accepted its appointment pursuant to this Section 7.08. The Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding may remove the Trustee by so notifying the Trustee and the Company. The Company shall remove the Trustee if:

(1) the Trustee fails to comply with Section 7.10;

(2) the Trustee is adjudged bankrupt or insolvent;

(3) a receiver or public officer takes charge of the Trustee or its property; or

(4) the Trustee otherwise becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of the Trustee for any reason, the Company shall promptly appoint, by resolution of its Board of Directors, a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company satisfactory in form and substance to the retiring Trustee and the Company. Thereupon the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall mail a notice of its succession to Securityholders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, subject to the lien provided for in Section 7.07.

If a successor Trustee does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company or the Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding may petition any court of competent jurisdiction for the appointment of a successor Trustee.

If the Trustee fails to comply with Section 7.10, any Securityholder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

SECTION 7.09. Successor Trustee by Merger. If the Trustee consolidates with, merges or converts into, or transfers all or substantially all its corporate trust business or assets to, another corporation, the resulting, surviving or transferee corporation without any further act shall be the successor Trustee.

SECTION 7.10. Eligibility; Disqualification. The Trustee shall at all times satisfy the requirements of TIA Sections 310(a)(1) and 310(b). The Trustee (or its parent holding company) shall have a combined capital and surplus of at least $50,000,000 as set forth in its most recent published annual report of condition. Nothing herein contained shall prevent the Trustee from filing with the Commission the application referred to in the penultimate paragraph of TIA Section 310(b).

SECTION 7.11. Preferential Collection of Claims Against Company. The Trustee shall comply with TIA Section 311(a), excluding any creditor relationship listed in TIA Section 311(b). A Trustee who has resigned or been removed shall be subject to TIA Section 311(a) to the extent indicated therein.

ARTICLE 8

DISCHARGE OF INDENTURE

SECTION 8.01. Discharge of Liability on Securities. When (i) the Company delivers to the Trustee all outstanding Securities (other than Securities replaced pursuant to Section 2.07) for cancellation or (ii) all outstanding Securities have become due and payable and the Company deposits with the Trustee cash or, if expressly permitted by the terms of the Securities, Common Stock sufficient to pay all amounts due and owing on all outstanding Securities (other than Securities replaced pursuant to Section 2.07), and if in either case the Company pays all other sums payable hereunder by the Company, then this Indenture shall, subject to Section 7.07, cease to be of further effect. The Trustee shall join in the execution of a document prepared by the Company acknowledging satisfaction and discharge of this Indenture on demand of the Company accompanied by an Officers' Certificate and Opinion of Counsel and at the cost and expense of the Company.

SECTION 8.02. Repayment to the Company. The Trustee and the Paying Agent shall return to the Company upon written request any money or securities held by them for the payment of any amount with respect to the Securities that remains unclaimed for two years after deposit of such money or securities with the Trustee or the Paying Agent, subject to applicable unclaimed property law. After return to the Company, Holders entitled to the money or securities must look to the Company for payment as general creditors unless an applicable abandoned property law designates another person and the Trustee and the Paying Agent shall have no further liability to the Securityholders with respect to such money or securities for that period commencing after the return thereof.

ARTICLE 9

AMENDMENTS

SECTION 9.01. Without Consent of Holders. The Company and the Trustee may amend this Indenture or the Securities without the consent of any Securityholder:

(1) to cure any ambiguity, omission, defect or inconsistency;

(2) to comply with Article 5 or Section 11.14;

(3) to provide for uncertificated Securities in addition to certificated Securities so long as such uncertificated Securities are in registered form for purposes of the Internal Revenue Code of 1986, as amended;

(4) to make any change that does not adversely affect the rights of any Securityholder;

(5) to make any change to comply with the TIA, or any amendment thereto, or to comply with any requirement of the SEC in connection with the qualification of the Indenture under the TIA; or

(6) to add to the covenants or obligations of the Company under this Indenture or surrender any right, power or option conferred by this Indenture on the Company.

SECTION 9.02. With Consent of Holders. With the written consent of the Holders of at least a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding, the Company and the Trustee may amend this Indenture or the Securities. However, without the consent of each Securityholder affected, an amendment to this Indenture or the Securities may not:

(1) make any change to the Principal Amount at Maturity of Securities whose Holders must consent to an amendment;

(2) make any change in the manner or rate of accrual in connection with Original Issue Discount, reduce the rate of interest referred to in paragraph 1 of the Securities, reduce the rate of interest referred to in Section 10.01 upon the occurrence of a Tax Event, or extend the time for payment of Original Issue Discount or interest, if any, on any Security;

(3) reduce the Principal Amount at Maturity, Restated Principal Amount or the Issue Price of or extend the Stated Maturity of any Security;

(4) reduce the Redemption Price, Purchase Price or Change in Control Purchase Price of any Security;

(5) make any Security payable in money or securities other than that stated in the Security;

(6) make any change in Section 6.04, Section 6.07 or this Section 9.02, except to increase any percentage set forth therein;

(7) make any change that adversely affects the right to convert any Security;

(8) make any change that adversely affects the right to require the Company to purchase the Securities in accordance with the terms thereof and this Indenture; or

(9) make any change to Article 12 that adversely affects the rights of the Holders.

It shall not be necessary for the consent of the Holders under this Section 9.02 to approve the particular form of any proposed amendment, but it shall be sufficient if such consent approves the substance thereof.

After an amendment under this Section 9.02 becomes effective, the Company shall mail to each Holder a notice briefly describing the amendment.

SECTION 9.03. Compliance with Trust Indenture Act. Every supplemental indenture executed pursuant to this Article shall comply with the TIA.

SECTION 9.04. Revocation and Effect of Consents, Waivers and Actions. Until an amendment, waiver or other action by Holders becomes effective, a consent thereto by a Holder of a Security hereunder is a continuing consent by the Holder and every subsequent Holder of that Security or portion of the Security that evidences the same obligation as the consenting Holder's Security, even if notation of the consent, waiver or action is not made on the Security. However, any such Holder or subsequent Holder may revoke the consent, waiver or action as to such Holder's Security or portion of the Security if the Trustee receives the notice of revocation before the date the amendment, waiver or action becomes effective. After an amendment, waiver or action becomes effective, it shall bind every Securityholder.

SECTION 9.05. Notation on or Exchange of Securities. Securities authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities so modified as to conform, in the opinion of the Trustee and the Board of Directors, to any such

supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for outstanding Securities.

SECTION 9.06. Trustee to Sign Supplemental Indentures. The Trustee shall sign any supplemental indenture authorized pursuant to this Article 9 if the amendment contained therein does not adversely affect the rights, duties, liabilities or immunities of the Trustee. If it does, the Trustee may, but need not, sign such supplemental indenture. In signing such supplemental indenture the Trustee shall be entitled to receive, and (subject to the provisions of Section 7.01) shall be fully protected in relying upon, an Officers' Certificate and an Opinion of Counsel stating that such amendment is authorized or permitted by this Indenture.

SECTION 9.07. Effect of Supplemental Indentures. Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

ARTICLE 10

SPECIAL TAX EVENT CONVERSION

SECTION 10.01. Optional Conversion to Semiannual Coupon Note upon Tax Event. From and after (i) the date (the "Tax Event Date") of the occurrence of a Tax Event and (ii) the date the Company exercises such option, whichever is later (the "Option Exercise Date"), at the option of the Company, interest in lieu of future Original Issue Discount shall accrue at the rate of 5.5% per annum on a restated principal amount per $1,000 original Principal Amount at Maturity (the "Restated Principal Amount") equal to the Issue Price plus Original Issue Discount accrued through the Option Exercise Date and shall be payable semiannually on February 16 and August 16 of each year (each an "Interest Payment Date") to holders of record at the close of business on February 1 or August 1 (each a "Regular Record Date") immediately preceding such Interest Payment Date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months and will accrue from the most recent date on which interest has been paid or, if no interest has been paid, from the Option Exercise Date. Within 15 days of the occurrence of a Tax Event, the Company shall mail a written notice of such Tax Event by first-class mail to the Trustee and within 15 days of its exercise of such option the Company shall mail a written notice of the Option Exercise Date by first-class mail to the Trustee and Holders of the Securities. From and after the Option Exercise Date, (i) the Company shall be obligated to pay at Stated Maturity, in lieu of the Principal Amount at Maturity of a Security, the Restated Principal Amount thereof and (ii) "Issue Price and accrued Original Issue Discount," "Issue Price plus Original Issue Discount" or similar words, as used herein, shall mean Restated Principal Amount plus accrued and unpaid interest with respect to any Security. Securities authenticated and

delivered after the Option Exercise Date may, and shall if required by the Trustee, bear a notation in a form approved by the Trustee as to the conversion of the Securities to semiannual coupon notes.

SECTION 10.02. Payment of Interest; Interest Rights Preserved. (a) Interest on any Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the person in whose name that Security is registered at the close of business on the Regular Record Date for such interest at the office or agency of the Company maintained for such purpose. Each installment of interest on any Security shall be paid in same-day funds by transfer to an account maintained by the payee located inside the United States. In the case of a permanent Global Security, interest payable on any Interest Payment Date will be paid to the Depositary, with respect to that portion of such permanent Global Security held for its account by Cede & Co. for the purpose of permitting such party to credit the interest received by it in respect of such permanent Global Security to the accounts of the beneficial owners thereof.

(b) Except as otherwise specified with respect to the Securities, any interest on any Security that is payable, but is not punctually paid or duly provided for, within 30 days following on any Interest Payment Date (herein called "Defaulted Interest," which term shall include any accrued and unpaid interest that has accrued on such defaulted amount in accordance with paragraph 1 of the Securities), shall forthwith cease to be payable to the registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, as its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the persons in whose names the Securities are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Security and the date of the proposed payment (which shall not be less than 20 days after such notice is received by the Trustee), and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit on or prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Holder of Securities at his

address as it appears on the list of Securityholders maintained pursuant to Section 2.05 not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been mailed as aforesaid, such Defaulted Interest shall be paid to the persons in whose names the Securities are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (2).

(2) The Company may make payment of any Defaulted Interest on the Securities in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section and Section 2.06, each Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

ARTICLE 11

CONVERSION

SECTION 11.01. Conversion Privilege. A Holder of a Security may convert such Security into Common Stock at any time during the period stated in paragraph 8 of the Securities. The number of shares of Common Stock issuable upon conversion of a Security per $1,000 of Principal Amount at Maturity thereof (the "Conversion Rate") shall be that set forth in paragraph 8 in the Securities, subject to adjustment as herein set forth.

A Holder may convert a portion of the Principal Amount at Maturity of a Security if the portion is $1,000 or an integral multiple of $1,000. Provisions of this Indenture that apply to conversion of all of a Security also apply to conversion of a portion of a Security.

"Quoted Price" means, for any given day, the last reported per share sale price (or, if no sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and average ask prices) on such day of the Common Stock on the New York Stock Exchange Composite Tape or, in the event shares of Common Stock are not listed on the New York Stock Exchange, in the composite transactions for such other national or regional securities exchange upon which the Common Stock is listed, or, if the shares of Common Stock are not listed on a national or regional securities exchange, as quoted on the National Association of Securities Dealers Automated Quotation System or by the National

Quotation Bureau Incorporated. In the absence of such quotations, the Company shall be entitled to determine the Quoted Price on the basis of such quotations as it considers appropriate.

"Average Quoted Price" means the average of the Quoted Prices of the Common Stock for the shorter of

(i) 30 consecutive trading days ending on the last full trading day prior to the Time of Determination with respect to the rights, warrants or options or distribution in respect of which the Average Quoted Price is being calculated, or

(ii) the period (x) commencing on the date next succeeding the first public announcement of (a) the issuance of rights, warrants or options or (b) the distribution, in each case, in respect of which the Average Quoted Price is being calculated and (y) proceeding through the last full trading day prior to the Time of Determination with respect to the rights, warrants or options or distribution in respect of which the Average Quoted Price is being calculated (excluding days within such period, if any, which are not trading days), or

(iii) the period, if any, (x) commencing on the date next succeeding the Ex-Dividend Time with respect to the next preceding (a) issuance of rights, warrants or options or (b) distribution, in each case, for which an adjustment is required by the provisions of Section 11.06(4), 11.07 or 11.08 and (y) proceeding through the last full trading day prior to the Time of Determination with respect to the rights, warrants or options or distribution in respect of which the Average Quoted Price is being calculated (excluding days within such period, if any, which are not trading days).

In the event that the Ex-Dividend Time (or in the case of a subdivision, combination or reclassification, the effective date with respect thereto) with respect to a dividend, subdivision, combination or reclassification to which Section 11.06(l), (2), (3) or (5) applies occurs during the period applicable for calculating "Average Quoted Price" pursuant to the definition in the preceding sentence, "Average Quoted Price" shall be calculated for such period in a manner determined by the Board of Directors to reflect the impact of such dividend, subdivision, combination or reclassification on the Quoted Price of the Common Stock during such period.

"Time of Determination" means the time and date of the earlier of (i) the determination of stockholders entitled to receive rights, warrants or options or a distribution, in each case, to which Section 11.07 or 11.08 applies and (ii) the time ("Ex-Dividend Time") immediately prior to the commencement of "ex-dividend" trading for such rights, warrants or options or distribution on the New York Stock Exchange or such other national or regional exchange or market on which the Common Stock is then listed or quoted.

SECTION 11.02. Conversion Procedure. To convert a Security a Holder must satisfy the requirements in paragraph 8 of the Securities. The date on which the Holder satisfies all those requirements is the conversion date (the "Conversion Date"). As soon as practicable after the Conversion Date, the Company shall deliver to the Holder, through the Conversion Agent, a certificate for the number of full shares of Common Stock issuable upon the conversion and cash in lieu of any fractional share determined pursuant to Section 11.03. The person in whose name the certificate is registered shall be treated as a stockholder of record on and after the Conversion Date; provided, however, that no surrender of a Security on any date when the stock transfer books of the Company shall be closed shall be effective to constitute the person or persons entitled to receive the shares of Common Stock upon such conversion an the record holder or holders of such shares of Common Stock on such date, but such surrender shall be effective to constitute the person or persons entitled to receive such shares of Common Stock as the record holder or holders thereof for all purposes at the close of business on the next succeeding day on which such stock transfer books are open; such conversion shall be at the Conversion Rate in effect on the date that such Security shall have been surrendered for conversion, as if the stock transfer books of the Company had not been closed. Upon conversion of a Security, such person shall no longer be a Holder of such Security.

No payment or adjustment will be made for dividends on, or other distributions with respect to, any Common Stock except as provided in this Article 11. On conversion of a Security, that portion of accrued Original Issue Discount (or interest, if the Company has exercised its option provided for in Section 10.01) attributable to the period from the Issue Date (or, if the Company has exercised the option provided for in Section 10.01, the later of (x) the date of such exercise and (y) the date on which interest was last paid) of the Security through the Conversion Date with respect to the converted Security shall not be cancelled, extinguished or forfeited, but rather shall be deemed to be paid in full to the Holder thereof through delivery of the Common Stock (together with the cash payment, if any, in lieu of fractional shares) in exchange for the Security being converted pursuant to the provisions hereof; and the fair market value of such shares of Common Stock (together with any such cash payment in lieu of fractional shares) shall be treated as issued, to the extent thereof, first in exchange for Original Issue Discount (or interest, if the Company has exercised its option provided for in Section 10.01) accrued through the Conversion Date, and the balance, if any, of such fair market value of such Common Stock (and any much cash payment) shall be treated as issued in exchange for the Issue Price of the Security being converted pursuant to the provisions hereof.

If the Holder converts more than one Security at the same time, the number of shares of Common Stock issuable upon the conversion shall be based on the total Principal Amount at Maturity of the Securities converted.

If the last day an which a Security may be converted is a Legal Holiday, the Security may be surrendered on the next succeeding day that is not a Legal Holiday.

Upon surrender of a Security that is converted in part, the Company shall execute, and the Trustee shall authenticate and deliver to the Holder, a new Security in an authorized denomination equal in Principal Amount at Maturity to the unconverted portion of the Security surrendered.

SECTION 11.03. Fractional Shares. The Company will not issue a fractional share of Common Stock upon conversion of a Security. Instead, the Company will deliver cash for the current market value of the fractional share. The current market value of a fractional share shall be determined, to the nearest 1/1,000th of a share, by multiplying the Quoted Price, on the last trading day prior to the Conversion Date, of a full share by the fractional amount and rounding the product to the nearest whole cent.

SECTION 11.04. Taxes on Conversion. If a Holder converts a Security, the Company shall pay any documentary, stamp or similar issue or transfer tax due on the issue of shares of Common Stock upon the conversion. However, the Holder shall pay any such tax which is due because the Holder requests the shares to be issued in a name other than the Holder's name. The Conversion Agent may refuse to deliver the certificates representing the Common Stock being issued in a name other than the Holder's name until the Conversion Agent receives a sum sufficient to pay any tax which will be due because the shares are to be issued in a name other than the Holder's name. Nothing herein shall preclude any tax withholding required by law or regulations.

SECTION 11.05. Company to Provide Stock. The Company shall, prior to issuance of any Securities under this Article 11, and from time to time an may be necessary, reserve out of its authorized but unissued Common Stock a sufficient number of shares of Common Stock to permit the conversion of the Securities.

All shares of Common Stock delivered upon conversion of the Securities shall be newly issued shares or treasury shares, shall be duly and validly issued and fully paid and nonassessable and shall be free from preemptive rights and free of any lien or adverse claim.

The Company will endeavor promptly to comply with all Federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Securities, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or in the over-the-counter market or such other market on which the Common Stock is then listed or quoted.

SECTION 11.06. Adjustment for Change in Capital Stock. If, after the Issue Date of the Securities, the Company:

(1) pays a dividend or makes a distribution on its Common Stock in shares of its Common Stock;

(2) subdivides its outstanding shares of Common Stock into a greater number of shares;

(3) combines its outstanding shares of Common Stock into a smaller number of shares;

(4) pays a dividend or makes a distribution on its Common Stock in shares of its Capital Stock (other than Common Stock or rights, warrants or options for its Capital Stock); or

(5) issues by reclassification of its Common Stock any shares of its Capital Stock (other than rights, warrants or options for its Capital Stock),

then the conversion privilege and the Conversion Rate in effect immediately prior to such action shall be adjusted so that the Holder of a Security thereafter converted may receive the number of shares of Capital Stock of the Company which such Holder would have owned immediately following such action if such Holder had converted the Security immediately prior to such action.

The adjustment shall become effective immediately after the record date in the case of a dividend or distribution and immediately after the effective date in the case of a subdivision, combination or reclassification.

If after an adjustment a Holder of a Security upon conversion of such Security may receive shares of two or more classes of Capital Stock of the Company, the Conversion Rate shall thereafter be subject to adjustment upon the occurrence of an action taken with respect to any such class of Capital Stock as is contemplated by this Article 11 with respect to the Common Stock, on terms comparable to those applicable to Common Stock in this Article 11.

SECTION 11.07. Adjustment for Rights Issue. If after the Issue Date of the Securities, the Company distributes any rights, warrants or options to all holders of its Common Stock entitling them, for a period expiring within 60 days after the record date for such distribution, to purchase shares of Common Stock at a price per share less than the Quoted Price as of the Time of Determination, the Conversion Rate shall be adjusted in accordance with the formula:

$$R' = R \times \frac{(O + N)}{(O + (N \times P)/M)}$$

where:

R' = the adjusted Conversion Rate.

R = the current Conversion Rate.

O = the number of shares of Common Stock outstanding on the record date for the distribution to which this Section 11.07 is being applied.

N = the number of additional shares of Common Stock offered pursuant to the distribution.

P = the offering price per share of the additional shares.

M = the Average Quoted Price, minus, in the case of (i) a distribution to which Section 11.06(4) applies or (ii) a distribution to which Section 11.08 applies, for which, in each case, (x) the record date shall occur on or before the record date for the distribution to which this Section 11.07 applies and (y) the Ex-Dividend Time shall occur on or after the date of the Time of Determination for the distribution to which this Section 11.07 applies, the fair market value (on the record date for the distribution to which this Section 11.07 applies) of the

(1) Capital Stock of the Company distributed in respect of each share of Common Stock in such Section 11.06(4) distribution and

(2) assets of the Company or debt securities or any rights, warrants or options to purchase securities of the Company distributed in respect of each share of Common Stock in such Section 11.08 distribution.

The Board of Directors shall determine fair market values for the purposes of this Section 11.07.

The adjustment shall become effective immediately after the record date for the determination of shareholders entitled to receive the rights, warrants or options to which this Section 11.07 applies. If all of the shares of Common Stock subject to such rights, warrants or options have not been issued when such rights, warrants or options expire, then the Conversion Rate shall promptly be readjusted to the Conversion Rate which would then be in effect had the adjustment upon the issuance of such rights, warrants or options been made on the basis of the actual number of shares of Common Stock issued upon the exercise of such rights, warrants or options.

No adjustment shall be made under this Section 11.07 if the application of the formula stated above in this Section 11.07 would result in a value of R' that is equal to or less than the value of R.

SECTION 11.08. Adjustment for Other Distributions. If, after the Issue Date of the Securities, the Company distributes to all holders of its Common Stock any of its assets, or debt securities or any rights, warrants or options to purchase securities of the Company (including securities or cash, but excluding (x) distributions of Capital Stock referred to in Section 11.06 and distributions of rights, warrants or options referred to in Section 11.07 and (y) cash dividends or other cash distributions that are paid out of consolidated current net earnings or earnings retained in the business as shown on the books of the Company unless such cash dividends or other cash distributions are Extraordinary Cash Dividends), the Conversion Rate shall be adjusted, subject to the provisions of the last paragraph of this Section 11.08, in accordance with the formula:

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

where:

R' = the adjusted Conversion Rate.

R = the current Conversion Rate.

M = the Average Quoted Price, minus, in the case of a distribution to which Section 11.06(4) applies, for which (i) the record date shall occur on or before the record date for the distribution to which this Section 11.08 applies and (ii) the Ex-Dividend Time shall occur on or after the date of the Time of Determination for the distribution to which this Section 11.08 applies, the fair market value (on the record date for the distribution to which this Section 11.08 applies) of any Capital Stock of the Company distributed in respect of each share of Common Stock in such Section 11.06(4) distribution.

F = the fair market value (on the record date for the distribution to which this Section 11.08 applies) of the assets, securities, rights, warrants or options to be distributed in respect of each share of Common Stock in the distribution to which this Section 11.08 is being applied (including, in the case of cash dividends or other cash distributions giving rise to an adjustment, all such cash distributed concurrently).

The Board of Directors shall determine fair market values for the purposes of this Section 11.08.

The adjustment shall become effective immediately after the record date for the determination of shareholders entitled to receive the distribution to which this Section 11.08 applies.

For purposes of this Section 11.08, the term "Extraordinary Cash Dividend" shall mean any cash dividend with respect to the Common Stock the amount of which, together with the aggregate amount of cash dividends on the Common Stock to be aggregated with such cash dividend in accordance with the provisions of this paragraph, equals or exceeds the threshold percentages set forth in item (i) or (ii) below:

(i) If, upon the date prior to the Ex-Dividend Time with respect to a cash dividend on the Common Stock, the aggregate amount of such cash dividend together with the amounts of all cash dividends on the Common Stock with Ex-Dividend Times occurring in the 85 consecutive day period ending on the date prior to the Ex-Dividend Time with respect to the cash dividend to which this provision is being applied equals or exceeds on a per share basis 12.5% of the average of the Quoted Prices during the period beginning on the date after the first such Ex-Dividend Time in such period and ending on the date prior to the Ex-Dividend Time with respect to the cash dividend to which this provision is being applied (except that if no other cash dividend has had an Ex-Dividend Time occurring in such period, the period for calculating the average of the Quoted Prices shall be the period commencing 85 days prior to the date prior to the Ex-Dividend Time with respect to the cash dividend to which this provision is being applied), such cash dividend together with each other cash dividend with an Ex-Dividend Time occurring in such 85 day period shall be deemed to be an Extraordinary Cash Dividend and for purposes of applying the formula set forth above in this Section 11.08, the value of "F" shall be equal to (w) the aggregate amount of such cash dividend together with the amounts of the other cash dividends with Ex-Dividend Times occurring in such period minus (x) the aggregate amount of such other cash dividends with Ex-Dividend Times occurring in such period for which a prior adjustment in the Conversion Rate was previously made under this Section 11.08.

(ii) If, upon the date prior to the Ex-Dividend Time with respect to a cash dividend on the Common Stock, the aggregate amount of such cash dividend together with the amounts of all cash dividends on the Common Stock with Ex-Dividend Times occurring in the 365 consecutive day period ending on the date prior to the Ex-Dividend Time with respect to the cash dividend to which this provision is being applied equals or exceeds on a per share basis 25% of the average of the Quoted Prices during the period beginning on the date after the first such Ex-Dividend Time in such period and ending on the date prior to the Ex-Dividend Time with respect to the cash dividend to which this provision is being applied (except that if no other cash dividend has had an Ex-Dividend Time occurring in such period, the period for calculating the average of the Quoted Prices shall be the period commencing 365 days prior to the date prior to the Ex-Dividend Time

with respect to the cash dividend to which this provision is being applied), such cash dividend together with each other cash dividend with an Ex-Dividend Time occurring in such 365 day period shall be deemed to be an Extraordinary Cash Dividend and for purposes of applying the formula set forth above in this Section 11.08, the value of "F" shall be equal to (y) the aggregate amount of much cash dividend together with the amounts of the other cash dividends with Ex-Dividend Times occurring in such period minus (z) the aggregate amount of such other cash dividends with Ex-Dividend Times occurring in such period for which a prior adjustment in the Conversion Rate was previously made under this Section 11.08.

In making the determinations required by items (i) and (ii) above, the amount of cash dividends paid on a per share basis and the average of the Quoted Prices, in each case during the period specified in item (i) or (ii) above, as applicable, shall be appropriately adjusted to reflect the occurrence during such period of any event described in Section 11.06.

In the event that, with respect to any distribution to which this Section 11.08 would otherwise apply, the difference "M-F" as defined in the above formula is less than $1.00 or "F" is equal to or greater than "M," then the adjustment provided by this Section 11.08 shall not be made and in lieu thereof the provisions of Section 11.14 shall apply to such distribution.

SECTION 11.09. When Adjustment May Be Deferred. No adjustment in the Conversion Rate need be made unless the adjustment would require an increase or decrease of at least 1% in the Conversion Rate. Any adjustments that are not made shall be carried forward and taken into account in any subsequent adjustment.

All calculations under this Article 11 shall be made to the nearest cent or to the nearest 1/1,000th of a share, as the case may be.

SECTION 11.10. When No Adjustment Required. No adjustment need be made for a transaction referred to in Section 11.06, 11.07, 11.08 or 11.14 if Securityholders are to participate in the transaction on a basis and with notice that the Board of Directors determines to be fair and appropriate in light of the basis and notice on which holders of Common Stock participate in the transaction. Such participation by Securityholders may include participation upon conversion provided that an adjustment shall be made at such time as the Securityholders are no longer entitled to participate.

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

No adjustment need be made for a change in the par value or no par value of the Common Stock.

To the extent the Securities become convertible pursuant to this Article 11 into cash, no adjustment need be made thereafter as to the cash. Interest will not accrue on the cash.

Notwithstanding anything else to the contrary in this Article 11, no adjustment need be made in connection with the conversion of the convertible preferred stock of the Company outstanding on February 9, 1999 into shares of Common Stock.

SECTION 11.11. Notice of Adjustment. Whenever the Conversion Rate is adjusted, the Company shall promptly mail to Securityholders a notice of the adjustment. The Company shall file with the Trustee and the Conversion Agent such notice and a certificate from the Company's independent public accountants briefly stating the facts requiring the adjustment and the manner of computing it. The certificate shall be conclusive evidence that the adjustment is correct. Neither the Trustee nor any Conversion Agent shall be under any duty or responsibility with respect to any such certificate except to exhibit the same to any Holder desiring inspection thereof.

SECTION 11.12. Voluntary Increase. The Company from time to time may increase the Conversion Rate by any amount for any period of time. Whenever the Conversion Rate is increased, the Company shall mail to Securityholders and file with the Trustee and the Conversion Agent a notice of the increase. The Company shall mail the notice at least 15 days before the date the increased Conversion Rate takes effect. The notice shall state the increased Conversion Rate and the period it will be in effect.

A voluntary increase of the Conversion Rate does not change or adjust the Conversion Rate otherwise in effect for purposes of Section 11.06, 11.07 or 11.08.

SECTION 11.13. Notice of Certain Transactions. If:

(1) the Company takes any action that would require an adjustment in the Conversion Rate pursuant to Section 11.06, 11.07 or 11.08 (unless no adjustment is to occur pursuant to Section 11.10); or

(2) the Company takes any action that would require a supplemental indenture pursuant to Section 11.14; or

(3) there is a liquidation or dissolution of the Company;

then the Company shall mail to Securityholders and file with the Trustee and the Conversion Agent a notice stating the proposed record date for a dividend or distribution or the proposed effective date of a subdivision, combination, reclassification, consolidation, merger, binding share exchange, transfer, liquidation or dissolution. The Company shall file and mail the notice

at least 15 days before such date. Failure to file or mail the notice or any defect in it shall not affect the validity of the transaction.

SECTION 11.14. Reorganization of Company; Special Distributions. If the Company is a party to a transaction subject to Section 5.01 (other than a sale of all or substantially all of the assets of the Company in a transaction in which the holders of Common Stock immediately prior to such transaction do not receive securities, cash or other assets of the Company or any other person) or a merger or binding share exchange which reclassifies or changes its outstanding Common Stock, the person obligated to deliver securities, cash or other assets upon conversion of Securities shall enter into a supplemental indenture. If the issuer of securities deliverable upon conversion of Securities is an Affiliate of the successor Company, that issuer shall join in the supplemental indenture.

The supplemental indenture shall provide that the Holder of a Security may convert it into the kind and amount of securities, cash or other assets which such Holder would have received immediately after the consolidation, merger, binding share exchange or transfer if such Holder had converted the Security immediately before the effective date of the transaction, assuming (to the extent applicable) that such Holder (i) was not a constituent person or an Affiliate of a constituent person to such transaction; (ii) made no election with respect thereto; and (iii) was treated alike with the plurality of non-electing Holders. The supplemental indenture shall provide for adjustments which shall be as nearly equivalent as may be practical to the adjustments provided for in this Article 11. The successor Company shall mail to Securityholders a notice briefly describing the supplemental indenture.

If this Section applies, neither Section 11.06 nor 11.07 applies.

If the Company makes a distribution to all holders of its Common Stock of any of its assets, or debt securities or any rights, warrants or options to purchase securities of the Company that, but for the provisions of the last paragraph of Section 11.08, would otherwise result in an adjustment in the Conversion Rate pursuant to the provisions of Section 11.08, then, from and after the record date for determining the holders of Common Stock entitled to receive the distribution, a Holder of a Security that converts such Security in accordance with the provisions of this Indenture shall upon such conversion be entitled to receive, in addition to the shares of Common Stock into which the Security is convertible, the kind and amount of securities, cash or other assets comprising the distribution that such Holder would have received if such Holder had converted the Security immediately prior to the record date for determining the holders of Common Stock entitled to receive the distribution.

SECTION 11.15. Company Determination Final. Any determination that the Company or the Board of Directors must make pursuant to Section 11.03, 11.06, 11.07, 11.08, 11.09, 11.10, 11.14 or 11.17 is conclusive.

SECTION 11.16. Trustee's Adjustment Disclaimer. The Trustee has no duty to determine when an adjustment under this Article 11 should be made, how it should be made or what it should be. The Trustee has no duty to determine whether a supplemental indenture under Section 11.14 need be entered into or whether any provisions of any supplemental indenture are correct. The Trustee shall not be accountable for and makes no representation as to the validity or value of any securities or assets issued upon conversion of Securities. The Trustee shall not be responsible for the Company's failure to comply with this Article 11. Each Conversion Agent shall have the same protection under this Section 11.16 as the Trustee.

SECTION 11.17. Simultaneous Adjustments. In the event that this Article 11 requires adjustments to the Conversion Rate under more than one of Sections 11.06(4), 11.07 or 11.08, and the record dates for the distributions giving rise to such adjustments shall occur on the same date, then such adjustments shall be made by applying, first, the provisions of Section 11.06, second, the provisions of Section 11.08 and, third, the provisions of Section 11.07.

SECTION 11.18. Successive Adjustments. After an adjustment to the Conversion Rate under this Article 11, any subsequent event requiring an adjustment under this Article 11 shall cause an adjustment to the Conversion Rate as so adjusted.

SECTION 11.19. Rights Issued in Respect of Common Stock Issued upon Conversion. Each share of Common Stock issued upon conversion of Securities pursuant to this Article 11 shall be entitled to receive the appropriate number of common stock or preferred stock purchase rights, as the case may be (the "Rights"), if any, and the certificates representing the Common Stock issued upon such conversion shall bear such legends, if any, in each case as may be provided by the terms of any shareholder rights agreement adopted by the Company, as the same may be amended from time to time (in each case, a "Rights Agreement"). Notwithstanding anything else to the contrary in this Article 11, there shall not be any adjustment to the conversion privilege or Conversion Rate as a result of the issuance of Rights, the distribution of separate certificates representing the Rights, the exercise or redemption of such Rights in accordance with any such Rights Agreement, or the termination or invalidation of such Rights.

ARTICLE 12

SUBORDINATION

SECTION 12.01. Securities Subordinate to Senior Indebtedness. The Company covenants and agrees, and each Holder of a Security, by his acceptance thereof, likewise covenants and agrees, that, to the extent and in the manner hereinafter set forth in this Article 12, the indebtedness represented by the Securities and the payment of the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, cash in respect of Purchase Price, cash in respect of a conversion, Change in Control Purchase Price and interest, if

any, in respect of each and all of the Securities are hereby expressly made subordinate and subject in right of payment to the prior payment in full of all Senior Indebtedness of the Company, as the case may be.

SECTION 12.02. Payment over of Proceeds upon Dissolution, Etc. Upon any distribution of assets of the Company in the event of:

(a) any insolvency or bankruptcy case or proceeding, or any receivership, liquidation, reorganization or other similar case or proceeding in connection therewith, relative to the Company or to its respective creditors, as such, or to its respective assets, or

(b) any liquidation, dissolution or other winding-up of the Company, whether voluntary or involuntary and whether or not involving insolvency or bankruptcy, or

(c) any assignment for the benefit of creditors or any other marshaling of assets and liabilities of the Company, or

(d) any other event that would constitute an Event of Default specified in Section 6.01(5) or 6.01(6),

then, and in any such event, the holders of Senior Indebtedness shall be entitled to receive

(1) payment in full in cash of all amounts due or to become due on or in respect of all Senior Indebtedness in cash or cash equivalents, or provision shall be made for such payment, before the Holders of the Securities are entitled to receive any payment on account of the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, cash in respect of the Purchase Price, cash in respect of a conversion, Change of Control Purchase Price or interest, if any, in respect of the Securities, and

(2) any payment or distribution of any kind or character, whether in cash, property or securities, which may be payable or deliverable in respect of the Securities in any such case, proceeding, dissolution, liquidation or other winding up or event, including any such payment or distribution which may be payable or deliverable by reason of the payment of any other indebtedness of the Company being subordinated to the payment of the Securities.

In the event that, notwithstanding the foregoing provisions of this Section, the Trustee or the Holder of any Security shall have received any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, including any such payment or distribution which may be payable or deliverable by reason of the payment of any

other indebtedness of the Company being subordinated to the payment of the Securities, before all Senior Indebtedness is paid in full in cash or payment thereof provided for, and if such fact shall, at or prior to the time of such payment or distribution, have been made known to the Trustee or, as the case may be, such Holder, then, in such event, such payment or distribution shall be paid over or delivered forthwith to the trustee in bankruptcy, receiver, liquidating trustee, Custodian, assignee, agent or other Person making payment or distribution of assets of the Company for application to the payment of all Senior Indebtedness remaining unpaid, to the extent necessary to pay all Senior Indebtedness in full in cash or as payment thereof is otherwise provided for (as such phrase is defined below), after giving effect to any concurrent payment or distribution to or for the holders of Senior Indebtedness.

For purposes of this Article 12 only, the words "cash, property or securities" shall not be deemed to include shares of Capital Stock of the Company, as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan or reorganization or readjustment the payment of which is subordinated, at least to the extent provided in this Article 12 with respect to the Securities, to the payment of all Senior Indebtedness which may at the time be outstanding; provided, however, that (i) Senior Indebtedness is assumed by the new corporation, if any, resulting from any such reorganization or readjustment, and (ii) the rights of the holders of the Senior Indebtedness are not, without the consent of such holders, altered by such reorganization or readjustment.

The consolidation of the Company with, or the merger of the Company into, another person or the liquidation or dissolution of the Company following the conveyance or transfer of its properties and assets substantially as an entirety to another person upon the terms and conditions set forth in Article 5 shall not be deemed a dissolution, winding up, liquidation, reorganization, assignment for the benefit of creditors or marshalling of assets and liabilities of the Company for the purposes of this Section if the person formed by such consolidation or into which the Company is merged or the person which acquires by conveyance or transfer such properties and assets of the Company, as the case may be, substantially as an entirety, as the case may be, shall as part of such consolidation, merger, conveyance or transfer, comply with the conditions set forth in Article 5.

SECTION 12.03. Acceleration of Securities. In the event that any Securities are declared due and payable before their Stated Maturity pursuant to Section 6.02, then and in such event the Company shall promptly notify holders of Senior Indebtedness of such acceleration. The Company may not pay the Securities until the earlier of (i) 120 or more days have passed after such acceleration occurs or (ii) the payment in full of all Senior Indebtedness or as payment thereof is otherwise provided for (as such phrase is defined below), and may thereafter pay the Securities if this Indenture permits the payment at that time.

In the event that, notwithstanding the foregoing, (a) the Company shall make any payment to the Trustee or the Holder of any Securities prohibited by the foregoing provisions of

this Section 12.03, and (b) with respect to any payment made before 120 or more days have passed after such acceleration occurs if such facts shall, at or prior to the time of such payment, have been made known to the Trustee or, as the case may be, such Holder, then and in such event such payment shall be paid over and delivered forthwith to the Company by or on behalf of the person holding such payment for the benefit of the holders of Senior Indebtedness.

The provisions of this Section 12.03 shall not apply to any payment with respect to which Section 12.02 would be applicable.

SECTION 12.04. Default on Senior Indebtedness. The Company may not make any payment of the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, Change of Control Purchase Price or interest, if any, in respect of the Securities and may not pay cash with respect to the Purchase Price (or portion thereof) or cash in respect of a conversion of any Security or otherwise acquire any Securities for cash or property if:

(1) any payment default on any Senior Indebtedness has occurred and is continuing beyond any applicable grace period with respect thereto; or

(2) a default (other than a default referred to in the preceding clause (1)) on any Senior Indebtedness occurs and is continuing that permits holders of such Senior Indebtedness to accelerate the maturity thereof and the default is the subject of judicial proceedings or the Company receives a notice of default thereof from any person who may give such notice pursuant to the instrument evidencing or document governing such Senior Indebtedness.

If the Company receives any such notice, then a similar notice received within nine months thereafter relating to the same default on the same issue of Senior Indebtedness shall not be effective for purposes of this Section 12.04.

The Company may resume payment on the Securities and may acquire Securities if and when:

(a) the default referred to above is cured or waived as provided or permitted in accordance with the terms of the applicable Senior Indebtedness; or

(b) in the case of a default referred to in clause (2) of the preceding paragraph, 179 or more days pass after the receipt by the Company of the notice described in clause (2) above; and

this Indenture otherwise permits the payment or acquisition at that time; provided, however, that with respect to payments made after the 179-day period referred to in clause (b) of this Section 12.04, the Trustee or the Holder of any Securities shall pay over and deliver forthwith to the

Company for the benefit of the holders of Senior Indebtedness any amounts received by the Trustee or any such Holder to the extent necessary to pay all holders of Senior Indebtedness in full in cash or otherwise provide for such payment thereof (as such phrase is defined above).

In the event that, notwithstanding the foregoing, (a) the Company shall make any payment to the Trustee or the Holder of any Security prohibited by the foregoing provisions of this Section, and (b) with respect to any payment made after the expiration of the 179-day period if such fact shall then have been made known to the Trustee or, as the case may be, such Holder, then and in such event such payment shall (to the extent permitted by law) be paid over and delivered forthwith to the Company by or on behalf of the person holding such payment for the benefit of the holders of the Senior Indebtedness.

The provisions of this Section shall not apply to any payment with respect to which Section 12.02 would be applicable.

SECTION 12.05. Payment Permitted If No Default. Nothing contained in this Article 12 or elsewhere in this Indenture or in any of the Securities shall prevent (a) the Company at any time except during the pendency of any case, proceeding, dissolution, liquidation or other winding up, assignment for the benefit of creditors or other marshaling of assets and liabilities of the Company referred to in Section 12.02 or under the conditions described in Section 12.03 or 12.04, from making payments at any time of Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, Purchase Price, Change of Control Purchase Price or interest, if any, as the case may be, in respect of the Securities if the Trustee did not, at the time of such application, have actual knowledge that such payment would have been prohibited by the provisions of this Article 12 or (b) the application by the Trustee of any money deposited with it hereunder to payment of or on account of the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, Purchase Price, Change in Control Purchase Price or interest, if any, as the case may be, in respect of the Securities or the retention of such payment by the Holders of the Securities, if, at the time of such application by the Trustee, the Trustee did not have actual knowledge that such payment would have been prohibited by the provisions of this Article 12.

SECTION 12.06. Subrogation to Rights of Holders of Senior Indebtedness. Subject to payment in full of all Senior Indebtedness to the extent and in the manner set forth in this Article 12, the Holders of the Securities shall be subrogated to the extent of the payments or distributions made to the holders of such Senior Indebtedness pursuant to the provisions of this Article 12 (equally and ratably with the holders of all indebtedness of the Company which by its express terms is subordinated to indebtedness of the Company to substantially the same extent as the Securities are subordinated and is entitled to like rights of subrogation) to the rights of the holders of such Senior Indebtedness to receive payments or distributions of cash, property and securities applicable to the Senior Indebtedness until the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, Purchase Price, Change of Control

Purchase Price or interest, if any, as the case may be, in respect of the Securities shall be paid in full. For purposes of such subrogation, no payments or distributions to the holders of the Senior Indebtedness of any cash, property or securities to which the Holders of the Securities or the Trustee would be entitled except for the provisions of this Article 12, and no payments over pursuant to the provisions of this Article 12 to the holders of Senior Indebtedness by Holders of the Securities or the Trustee, shall, as among the Company, the creditors of the Company, other than holders of Senior Indebtedness and the Holders of the Securities, be deemed to be a payment or distribution by the Company to or on account of the Senior Indebtedness.

SECTION 12.07. Provisions Solely to Define Relative Rights. The provisions of this Article 12 are and are intended solely for the purpose of defining the relative rights of the Holders of the Securities, on the one hand, and the holders of Senior Indebtedness, on the other hand. Nothing contained in this Article 12 or elsewhere in this Indenture or in the Securities is intended to or shall (a) impair, as among the Company, the creditors of the Company other than holders of Senior Indebtedness and the Holders of the Securities, the obligation of the Company, which is absolute and unconditional, to pay to the Holders of the Securities the Principal Amount at Maturity, Issue Price, accrued Original Issue Discount, Redemption Price, Purchase Price, Change of Control Purchase Price or interest, if any, as the case may be, in respect of the Securities as and when the same shall become due and payable in accordance with the terms of the Securities and this Indenture; or (b) affect the relative rights against the Company of the Holders of the Securities and creditors of the Company other than the holders of Senior Indebtedness; or (c) prevent the Trustee or the Holder of any Security from exercising all remedies otherwise permitted by applicable law upon default under this Indenture, subject to the rights, if any, under this Article 12 of the holders of Senior Indebtedness to receive cash, property and securities otherwise payable or deliverable to the Trustee or such Holder.

SECTION 12.08. Trustee to Effectuate Subordination. Each Holder of a Security by his acceptance thereof authorizes and directs the Trustee on his behalf to take such action as may be necessary or appropriate to effectuate the subordination provided in this Article 12 and appoints the Trustee his attorney-in-fact for any and all such purposes.

SECTION 12.09. No Waiver of Subordination Provisions. No right of any present or future holder of any Senior Indebtedness to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Company or by any act or failure to act by any such holder, or by any non-compliance by the Company with the terms, provisions and covenants of this Indenture, regardless of any knowledge thereof any such holder may have or be otherwise charged with.

Without in any way limiting the generality of the foregoing paragraph, the holders of Senior Indebtedness may, at any time and from time to time, without the consent of or notice to the Trustee or the Holders of the Securities, without incurring responsibility to the Holders of the Securities and without impairing or releasing the subordination provided in this Article 12 or

the obligations hereunder of the Holders of the Securities to the holders of Senior Indebtedness, do any one or more of the following: (i) change the manner, place or terms of payment or extend the time of payment of, or renew, increase or alter, Senior Indebtedness, or otherwise amend or supplement in any manner Senior Indebtedness or any instrument evidencing the same or any agreement under which Senior Indebtedness is outstanding; (ii) sell, exchange, release or otherwise deal with any property pledged, mortgaged or otherwise securing Senior Indebtedness; (iii) release any person liable in any manner for the collection of Senior Indebtedness; and (iv) exercise or refrain from exercising any rights against the Company and any other Person.

SECTION 12.10. Notice to Trustee. The Company shall give prompt written notice to a Responsible Officer of the Trustee of any fact known to the Company which would prohibit the making of any payment to or by the Trustee in respect of the Securities. Notwithstanding the provisions of this Article 12 or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts which would prohibit the making of any payment to or by the Trustee in respect of the Securities, unless and until the Trustee shall have received written notice thereof from the Company, or a holder of Senior Indebtedness or from any trustee therefor; and, prior to the receipt of any such written notice, the Trustee shall be entitled in all respects to assume that no such facts exist.

The Trustee shall be entitled to rely on the delivery to it of a written notice by a person representing himself to be a holder of Senior Indebtedness (or a trustee therefor) to establish that such notice has been given by a holder of Senior Indebtedness (or a trustee therefor). In the event that the Trustee determines in good faith that further evidence is required with respect to the right of any person as a holder of Senior Indebtedness to participate in any payment or distribution pursuant to this Article 12, the Trustee may request such person to furnish evidence to the reasonable satisfaction of the Trustee as to the amount of Senior Indebtedness held by such person, the extent to which such person is entitled to participate in such payment or distribution and any other facts pertinent to the rights of such person under this Article 12, and if such evidence is not furnished, the Trustee may defer any payment to such Person pending judicial determination as to the right of such Person to receive such payment.

SECTION 12.11. Reliance on Judicial Order or Certificate of Liquidating Agent. Upon any payment or distribution of assets of the Company referred to in this Article 12, the Trustee and the Holders of the Securities shall be entitled to rely upon any final, nonappealable order or decree entered by any court of competent jurisdiction in which such insolvency, bankruptcy, receivership, liquidation, reorganization, dissolution, winding up or similar case or proceeding is pending, or a certificate of the trustee in bankruptcy, liquidating trustee, Custodian, receiver, assignee for the benefit of creditors, agent or other Person making such payment or distribution, delivered to the Trustee or to the Holders of Securities, for the purpose of ascertaining the persons entitled to participate in such payment or distribution, the holders of the Senior Indebtedness and other indebtedness of the Company, the amount thereof or payable

thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article 12.

SECTION 12.12. Trustee Not Fiduciary for Holders of Senior Indebtedness. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Indebtedness and shall not be liable to any such holders if it shall in good faith mistakenly pay over or distribute to Holders of Securities or to the Company or to any other person cash, property or securities to which any holders of Senior Indebtedness shall be entitled by virtue of this Article 12 or otherwise. The Trustee shall not be charged with knowledge of the existence of Senior Indebtedness or of any facts that would prohibit any payment hereunder or that would permit the resumption of any such payment unless a Responsible Officer of the Trustee shall have received notice to that effect at the address of the Trustee set forth in Section 13.02. With respect to the holders of Senior Indebtedness, the Trustee undertakes to perform or to observe only such of its covenants or obligations as are specifically set forth in this Article 12 and no implied covenants or obligations with respect to holders of Senior Indebtedness shall be read into this Indenture against the Trustee.

SECTION 12.13. Rights of Trustee as Holder of Senior Indebtedness; Preservation of Trustee's Rights. The Trustee in its individual capacity shall be entitled to all the rights set forth in this Article 12 with respect to any Senior Indebtedness which may at any time be held by it, to the same extent as any other holder of Senior Indebtedness, and nothing in this Indenture shall deprive the Trustee of any of its rights as such holder.

Nothing in this Article shall apply to claims of, or payments to, the Trustee under or pursuant to Section 7.07.

SECTION 12.14. Article 12 Applicable to Paying Agents. In case at any time any Paying Agent other than the Trustee shall have been appointed by the Company and be then acting hereunder, the term "Trustee" as used in this Article 12 shall in such case (unless the context otherwise requires) be construed as extending to and including such Paying Agent within its meaning as fully for all intents and purposes as if such Paying Agent were named in this Article 12 in addition to or in place of the Trustee; provided, however, that Sections 12.10 and 12.12 shall not apply to the Company or an Affiliate of the Company if the Company or any such Affiliate acts as Paying Agent.

ARTICLE 13

MISCELLANEOUS

SECTION 13.01. Trust Indenture Act Controls. If any provision of this indenture limits, qualifies, or conflicts with another provision which is required to be included in this Indenture by the TIA, the required provision shall control.

SECTION 13.02. Notices. Any request, demand, authorization, notice, waiver, consent or communication shall be in writing and delivered in person or mailed by first-class mail, postage prepaid, addressed as follows or transmitted by facsimile transmission (confirmed by guaranteed overnight courier) to the following facsimile numbers:

if to the Company:

IDEC Pharmaceuticals Corporation
11011 Torreyana Road
San Diego, California 92121

Telephone No. (619) 550-8500
Facsimile No. (619) 458-8887

Attention: [Chief Financial Officer]

if to the Trustee:

Chase Manhattan Bank and Trust Company, National Association
101 California Street
Suite 2725
San Francisco, CA 94111
Telephone No. (415) 954-9581
Facsimile No. (415) 693-8850

Attention: Corporate Trust Department

The Company or the Trustee by notice given to the other in the manner provided above may designate additional or different addresses for subsequent notices or communications.

Any notice or communication given to a Securityholder shall be mailed to the Securityholder, by first-class mail, postage prepaid, at the Securityholder's address as it appears on the registration books of the Registrar and shall be sufficiently given if so mailed within the time prescribed.

Failure to mail a notice or communication to a Securityholder or any defect in it shall not affect its sufficiency with respect to other Securityholders. If a notice or communication is mailed in the manner provided above, it is duly given, whether or not received by the addressee.

If the Company mails a notice or communication to the Securityholders, it shall mail a copy to the Trustee and each Registrar, Paying Agent, Conversion Agent or co-registrar.

SECTION 13.03. Communication by Holders with Other Holders. Securityholders may communicate pursuant to TIA Section 312(b) with other Securityholders with respect to their rights under this Indenture or the Securities. The Company, the Trustee, the Registrar, the Paying Agent, the Conversion Agent and anyone else shall have the protection of TIA Section 312(c).

SECTION 13.04. Certificate and Opinion as to Conditions Precedent. Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

(1) an Officers' Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and

(2) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

SECTION 13.05. Statements Required in Certificate or Opinion. Each Officers' Certificate or Opinion of Counsel with respect to compliance with a covenant or condition provided for in this Indenture shall include:

(1) a statement that each person making such Officers' Certificate or Opinion of Counsel has read such covenant or condition;

(2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such Officers' Certificate or Opinion of Counsel are based;

(3) a statement that, in the opinion of each such person, he has made such examination or investigation as is necessary to enable such person to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(4) a statement that, in the opinion of such person, such covenant or condition has been complied with.

SECTION 13.06. Separability Clause. In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 13.07. Rules by Trustee, Paying Agent, Conversion Agent and Registrar. The Trustee may make reasonable rules for action by or a meeting of Securityholders. The Registrar, Conversion Agent and the Paying Agent may make reasonable rules for their functions.

SECTION 13.08. Legal Holidays. A "Legal Holiday" is any day other than a Business Day. If any specified date (including a date for giving notice) is a Legal Holiday, the action shall be taken on the next succeeding day that is not a Legal Holiday, and, if the action to be taken on such date is a payment in respect of the Securities, no Original Issue Discount or interest, if any, shall accrue for the intervening period.

SECTION 13.09. GOVERNING LAW. THE LAWS OF THE STATE OF NEW YORK SHALL GOVERN THIS INDENTURE AND THE SECURITIES, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS.

SECTION 13.10. No Recourse Against Others. A director, officer, employee or stockholder, as such, of the Company shall not have any liability for any obligations of the Company under the Securities or this Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. By accepting a Security, each Securityholder shall waive and release all such liability. The waiver and release shall be part of the consideration for the issue of the Securities.

SECTION 13.11. Successors. All agreements of the Company in this Indenture and the Securities shall bind its successor. All agreements of the Trustee in this Indenture shall bind its successor.

SECTION 13.12. Multiple Originals. The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement. One signed copy is enough to prove this Indenture.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have executed this Indenture on behalf of the respective parties hereto as of the date first above written.

IDEC PHARMACEUTICALS CORPORATION

By /s/ Phillip M. Schneider

Title: Vice President and
Chief Financial Officer

Attest:

Title:

CHASE MANHATTAN BANK AND TRUST
COMPANY, NATIONAL ASSOCIATION

By /s/ Cecil Bobey

Title: Assistant Vice President

EXHIBIT A-1

[FORM OF FACE OF GLOBAL SECURITY]

FOR PURPOSES OF SECTIONS 1273 AND 1275 OF THE INTERNAL REVENUE CODE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT WITH RESPECT TO EACH $1,000 OF PRINCIPAL AMOUNT AT MATURITY OF THIS SECURITY IS $662.15, THE ISSUE DATE IS FEBRUARY 16, 1999, THE YIELD TO MATURITY IS 5.5%.

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY (AND ANY PAYMENT HEREON IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY), ANY TRANSFER PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.

TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF THE DEPOSITORY TRUST COMPANY, OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN ARTICLE TWO OF THE INDENTURE REFERRED TO ON THE REVERSE HEREOF.

THIS SECURITY AND THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS. NEITHER THIS SECURITY, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN OR THEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, REGISTRATION.

THE HOLDER OF THIS SECURITY, BY ITS ACCEPTANCE HEREOF, AGREES TO OFFER, SELL OR OTHERWISE TRANSFER SUCH SECURITY, PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") WHICH IS TWO YEARS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE COMPANY OR ANY AFFILIATE OF THE COMPANY WAS THE

OWNER OF ANY SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) ONLY (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, (B) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHICH NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (C) TO AN INSTITUTIONAL "ACCREDITED INVESTOR" WITHIN THE MEANING OF SUBPARAGRAPH (A)(1), (2), (3) OR (7) OF RULE 501 UNDER THE SECURITIES ACT THAT IS ACQUIRING THE SECURITY FOR ITS OWN ACCOUNT, OR FOR THE ACCOUNT OF SUCH AN INSTITUTIONAL "ACCREDITED INVESTOR," FOR INVESTMENT PURPOSES AND NOT WITH A VIEW TO, OR FOR OFFER OR SALE IN CONNECTION WITH, ANY DISTRIBUTION IN VIOLATION OF THE SECURITIES ACT, (D) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, OR (E) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE COMPANY'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (C) OR (E) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM, AND IN EACH OF THE FOREGOING CASES, A CERTIFICATE OF TRANSFER IN THE FORM APPEARING ON THE OTHER SIDE OF THIS SECURITY IS COMPLETED AND DELIVERED BY THE TRANSFEROR TO THE TRUSTEE. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE.

[THE FOREGOING LEGEND MAY BE REMOVED FROM THIS SECURITY ON SATISFACTION OF THE CONDITIONS SPECIFIED IN THE INDENTURE.]

IDEC PHARMACEUTICALS CORPORATION

Liquid Yield Option(TM) Note due 2019
(Zero Coupon-Subordinated)

No. R-
CUSIP:

Issue Date: February 16, 1999
Issue Price: $337.85
(for each $1,000 Principal Amount at Maturity)

Original Issue Discount: $662.15
(for each $1,000 Principal Amount at Maturity)

IDEC PHARMACEUTICALS CORPORATION, a Delaware corporation, promises to pay to _____ or registered assigns, the Principal Amount at Maturity of _____ Dollars on February 16, 2019.

This Security shall not bear interest except as specified on the other side of this Security. Original Issue Discount will accrue as specified an the other side of this Security. This Security is convertible as specified on the other side of this Security.

Additional provisions of this Security are set forth on the other side of this Security.

Dated:

IDEC PHARMACEUTICALS CORPORATION

By

Title:

Attest:

Title:

TRUSTEE'S CERTIFICATE OF
AUTHENTICATION

CHASE MANHATTAN BANK
AND TRUST COMPANY, NATIONAL ASSOCIATION

as Trustee, certifies that this is one of the Securities referred to in the within-mentioned Indenture.

By

Authorized Signatory

Dated:

[FORM OF REVERSE SIDE OF LYON]

Liquid Yield Option(TM) Note Due 2019
(Zero Coupon-Subordinated)

1. Interest.

This Security shall not bear interest, except as specified in this paragraph or in paragraph 10 hereof. If the Principal Amount at Maturity hereof or any portion of such Principal Amount at Maturity is not paid when due (whether upon acceleration pursuant to Section 6.02 of the Indenture, upon the date set for payment of the Redemption Price pursuant to paragraph 5 hereof, upon the date set for payment of the Purchase Price or Change in Control Purchase Price pursuant to paragraph 6 hereof or upon the Stated Maturity of this Security) or if interest due hereon or any portion of such interest is not paid when due in accordance with paragraph 10 hereof, then in each such case the overdue amount shall, to the extent permitted by law, bear interest at the rate of 5.5% per annum, compounded semiannually, which interest shall accrue from the date such overdue amount was originally due to the date payment of such amount, including interest thereon, has been made or duly provided for. All such interest shall be payable on demand. The accrual of such interest on overdue amounts shall be in lieu of, and not in addition to, the continued accrual of Original Issue Discount.

Original Issue Discount (the difference between the Issue Price and the Principal Amount at Maturity of the Security), in the period during which a Security remains outstanding, shall accrue at 5.5% per annum, on a semiannual bond equivalent basis using a 360-day year composed of twelve 30-day months, from the Issue Date of this Security.

2. Method of Payment.

Subject to the terms and conditions of the Indenture, the Company will make payments in respect of Redemption Prices, Purchase Prices, Change in Control Purchase Prices and at Stated Maturity to Holders who surrender Securities to a Paying Agent to collect such payments in respect of the Securities. The Company will pay cash amounts in money of the United States that at the time of payment is legal tender for payment of public and private debts. However, the Company may make such cash payments by check payable in such money.

3. Paying Agent, Conversion Agent and Registrar.

Initially, Chase Manhattan Bank and Trust Company, National Association, a national banking association organized under the laws of the United States (the "Trustee"), will act as Paying Agent, Conversion Agent and Registrar. The Company may appoint and change any Paying Agent, Conversion Agent, Registrar or co-registrar without notice, other than notice to the Trustee except that the Company will maintain at least one Paying Agent in the State of

New York, City of New York, Borough of Manhattan, which shall initially be an office or agency of the Trustee. The Company or any of its Subsidiaries or any of their Affiliates may act as Paying Agent, Conversion Agent, Registrar or co-registrar.

4. Indenture.

The Company issued the Securities under an Indenture dated as of February 16, 1999 (the "Indenture"), between the Company and the Trustee. The terms of the Securities include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939, as in effect from time to time (the "TIA"). Capitalized terms used herein and not defined herein have the meanings ascribed thereto in the Indenture. The Securities are subject to all such terms, and Securityholders are referred to the Indenture and the TIA for a statement of those terms.

The Securities are general unsecured obligations of the Company limited to $345,000,000 aggregate Principal Amount at Maturity (subject to Section 2.07 of the Indenture). The Indenture does not limit other indebtedness of the Company, secured or unsecured.

5. Redemption at the Option of the Company.

No sinking fund is provided for the Securities. The Securities are redeemable as a whole, or from time to time in part, at any time at the option of the Company at the Redemption Prices set forth below, provided that the Securities are not redeemable prior to February 16, 2004.

The table below shows Redemption Prices of a Security per $1,000 Principal Amount at Maturity on the dates shown below and at Stated Maturity, which prices reflect accrued Original Issue Discount calculated to each such date. The Redemption Price of a Security redeemed between such dates shall include an additional amount reflecting the additional Original Issue Discount accrued since the next preceding date in the table.

Redemption Date	(1) LYON Issue Price	(2) Accrued Original Issue Discount at 5.5%	(3) Redemption Price (1) + (2)
February 16, 2004	$ 337.85	$ 105.29	$ 443.14
February 16, 2005	337.85	130.00	467.85
February 16, 2006	337.85	156.09	493.94
February 16, 2007	337.85	183.63	521.48
February 16, 2008	337.85	212.70	550.55
February 16, 2009	337.85	243.40	581.25
February 16, 2010	337.85	275.81	613.66
February 16, 2011	337.85	310.02	647.87
February 16, 2012	337.85	346.15	684.00
February 16, 2013	337.85	384.28	722.13
February 16, 2014	337.85	424.55	762.40
February 16, 2015	337.85	467.06	804.91
February 16, 2016	337.85	511.93	849.78
February 16, 2017	337.85	559.32	897.17
February 16, 2018	337.85	609.34	947.19
At Stated Maturity	337.85	662.15	1,000.00

If converted to a semiannual coupon note following the occurrence of a Tax Event, this Security will be redeemable at the Restated Principal Amount plus accrued and unpaid interest from the date of such conversion through the Redemption Date; but in no event will this Security be redeemable before February 16, 2004.

6. Purchase by the Company at the Option of the Holder.

Subject to the terms and conditions of the Indenture, the Company shall become obligated to purchase, at the option of the Holder, the Securities held by such Holder on the following Purchase Dates and at the following Purchase Prices per $1,000 Principal Amount at Maturity, upon delivery of a Purchase Notice containing the information set forth in the Indenture, at any time from the opening of business on the date that is 20 Business Days prior to such Purchase Date until the close of business on such Purchase Date and upon delivery of the Securities to the Paying Agent by the Holder as set forth in the Indenture.

Purchase Date	Purchase Price
February 16, 2004	$443.14
February 16, 2009	$581.25

Purchase Date	Purchase Price
February 16, 2014	$762.40

The Purchase Price (equal to the Issue Price plus accrued Original Issue Discount to the Purchase Date) may be paid, at the option of the Company, in cash or by the issuance and delivery of shares of Common Stock of the Company, or in any combination thereof.

If prior to a Purchase Date this Security has been converted to a semiannual coupon note following the occurrence of a Tax Event, the Purchase Price will be equal to the Restated Principal Amount plus accrued and unpaid interest from the date of conversion to the Purchase Date.

At the option of the Holder and subject to the terms and conditions of the Indenture, the Company shall become obligated to purchase the Securities held by such Holder 35 Business Days after the occurrence of a Change in Control of the Company occurring on or prior to February 16, 2004 for a Change in Control Purchase Price equal to the Issue Price plus accrued Original Issue Discount to the Change in Control Purchase Date, which Change in Control Purchase Price shall be paid in cash. If prior to a Change in Control Purchase Date this Security has been converted to a semiannual coupon note following the occurrence of a Tax Event, the Change in Control Purchase Price shall be equal to the Restated Principal Amount plus accrued and unpaid interest from the date of conversion to the Change in Control Purchase Date.

Holders have the right to withdraw any Purchase Notice or Change in Control Purchase Notice, as the case may be, by delivering to the Paying Agent a written notice of withdrawal in accordance with the provisions of the Indenture.

If cash (and/or securities if permitted under the Indenture) sufficient to pay the Purchase Price or Change in Control Purchase Price, as the case may be, of all Securities or portions thereof to be purchased as of the Purchase Date or the Change in Control Purchase Date, as the case may be, is deposited with the Paying Agent on the Business Day following the Purchase Date or the Change in Control Purchase Date, as the case may be, Original Issue Discount ceases to accrue on such Securities (or portions thereof) immediately after such Purchase Date or Change in Control Purchase Date, as the case may be, and the Holder thereof shall have no other rights as such (other than the right to receive the Purchase Price or Change in Control Purchase Price, as the case may be, upon surrender of such Security).

7. Notice of Redemption.

Notice of redemption will be mailed at least 30 days but not more than 60 days before the Redemption Date to each Holder of Securities to be redeemed at the Holder's registered address. If money sufficient to pay the Redemption Price of all Securities (or portions thereof) to be redeemed on the Redemption Date is deposited with the Paying Agent prior to or on the Redemption Date, immediately after such Redemption Date Original Issue Discount

ceases to accrue on such Securities or portions thereof. Securities in denominations larger than $1,000 of Principal Amount at Maturity may be redeemed in part but only in integral multiples of $1,000 of Principal Amount at Maturity.

8. Conversion.

Subject to the next two succeeding sentences, a Holder of a Security may convert it into Common Stock of the Company at any time before the close of business on February 16, 2019. If the Security is called for redemption, the Holder may convert it at any time before the close of business on the Redemption Date. A Security in respect of which a Holder has delivered a Purchase Notice or Change in Control Purchase Notice exercising the option of such Holder to require the Company to purchase such Security may be converted only if such notice of exercise is withdrawn in accordance with the terms of the Indenture.

The initial Conversion Rate is 6.734 shares of Common Stock per $1,000 Principal Amount at Maturity, subject to adjustment in certain events described in the Indenture. The Company will deliver cash or a check in lieu of any fractional share of Common Stock.

In the event the Company exercises its option pursuant to Section 10.01 of the Indenture to have interest in lieu of Original Issue Discount accrue on the Security following a Tax Event, the Holder will be entitled on conversion to receive the same number of shares of Common Stock such Holder would have received if the Company had not exercised such option. If the Company exercises such option, Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business of such Interest Payment Date (except Securities to be redeemed on a date within such period) must be accompanied by payment of an amount equal to the interest thereon that the registered Holder is to receive. Except where Securities surrendered for conversion must be accompanied by payment as described above, no interest on converted Securities will be payable by the Company on any Interest Payment Date subsequent to the date of conversion.

To convert a Security, a Holder must (1) complete and manually sign the conversion notice below (or complete and manually sign a facsimile of such notice) and deliver such notice to the Conversion Agent, (2) surrender the Security to the Conversion Agent, (3) furnish appropriate endorsements and transfer documents if required by the Conversion Agent, the Company or the Trustee and (4) pay any transfer or similar tax, if required.

A Holder may convert a portion of a Security if the Principal Amount at Maturity of such portion in $1,000 or an integral multiple of $1,000. No payment or adjustment will be made for dividends on the Common Stock except as provided in the Indenture. On conversion of a Security, that portion of accrued Original Issue Discount (or interest if the Company has exercised its option provided for in paragraph 10 hereof) attributable to the period from the Issue Date (or, it the Company has exercised the option referred to in paragraph 10 hereof, the later of (x) the date of such exercise and (y) the date on which interest was last paid) through the

Conversion Date with respect to the converted Security shall not be cancelled, extinguished or forfeited, but rather shall be deemed to be paid in full to the Holder thereof through the delivery of the Common Stock (together with the cash payment, if any, in lieu of fractional shares) in exchange for the Security being converted pursuant to the terms hereof; and the fair market value of such shares of Common Stock (together with any such cash payment in lieu of fractional shares) shall be treated as issued, to the extent thereof, first in exchange for Original Issue Discount (or interest, if the Company has exercised its option provided for in paragraph 10 hereof) accrued through the Conversion Date, and the balance, if any, of such fair market value of such Common Stock (and any such cash payment) shall be treated as issued in exchange for the Issue Price of the Security being converted pursuant to the provisions hereof.

The Conversion Rate will be adjusted for dividends or distributions on Common Stock payable in Common Stock or other Capital Stock; subdivisions, combinations or certain reclassifications of Common Stock; distributions to all holders of Common Stock of certain rights to purchase Common Stock for a period expiring within 60 days at less than the Quoted Price at the Time of Determination; and distributions to such holders of assets or debt securities of the Company or certain rights to purchase securities of the Company (excluding certain cash dividends or distributions). However, no adjustment need be made if Securityholders may participate in the transaction or in certain other cases. The Company from time to time may voluntarily increase the Conversion Rate.

If the Company is a party to a consolidation, merger or binding share exchange or a transfer of all or substantially all of its assets, or upon certain distributions described in the Indenture, the right to convert a Security into Common Stock may be changed into a right to convert it into securities, cash or other assets of the Company or another person.

9. Conversion Arrangement on Call for Redemption.

Any Securities called for redemption, unless surrendered for conversion before the close of business on the Redemption Date, may be deemed to be purchased from the Holders of such Securities at an amount not less than the Redemption Price, by one or more investment bankers or other purchasers who may agree with the Company to purchase such Securities from the Holders, to convert them into Common Stock of the Company and to make payment for such Securities to the Trustee in trust for such Holders.

10. Tax Event.

(a) From and after (i) the date (the "Tax Event Date") of the occurrence of a Tax Event and (ii) the date the Company exercises such option, whichever is later (the "Option Exercise Date"), at the option of the Company, interest in lieu of future Original Issue Discount shall accrue at the rate of 5.5% per annum on a principal amount per Security (the "Restated Principal Amount") equal to the Issue Price plus Original Issue Discount accrued through the Option Exercise Date and shall be payable semiannually on February 16 and August 16 of each

year (each an "Interest Payment Date") to holders of record at the close of business on February 1 or August 1 (each a "Regular Record Date") immediately preceding such Interest Payment Date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months and will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the Option Exercise Date.

(b) Interest on any Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the person in whose name that Security is registered at the close of business on the Regular Record Date for such interest at the office or agency of the Company maintained for such purpose. Each installment of interest on any Security shall be paid in same-day funds by transfer to an account maintained by the payee located inside the United States.

(c) Except as otherwise specified with respect to the Securities, any Defaulted Interest on any Security shall forthwith cease to be payable to the registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company as provided for in Section 10.02(b) of the Indenture.

11. Denominations; Transfer; Exchange.

The Securities are in fully registered form, without coupons, in denominations of $1,000 of Principal Amount at Maturity and integral multiples of $1,000. A Holder may transfer or exchange Securities in accordance with the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The Registrar need not transfer or exchange any Securities selected for redemption (except, in the case of a Security to be redeemed in part, the portion of the Security not to be redeemed) or any Securities in respect of which a Purchase Notice or Change in Control Purchase Notice has been given and not withdrawn (except, in the case of a Security to be purchased in part, the portion of the Security not to be purchased) or any Securities for a period of 15 days before a selection of Securities to be redeemed.

12. Persons Deemed Owners.

The registered Holder of this Security may be treated as the owner of this Security for all purposes.

13. Unclaimed Money or Securities.

The Trustee and the Paying Agent shall return to the Company upon written request any money or securities held by them for the payment of any amount with respect to the Securities that remains unclaimed for two years after deposit of such money or securities with the Trustee or the Paying Agent, subject to applicable unclaimed property law. After return to the

Company, Holders entitled to the money or securities must look to the Company for payment as general creditors unless an applicable abandoned property law designates another person.

14. Amendment; Waiver.

Subject to certain exceptions set forth in the Indenture, (i) the Indenture or the Securities may be amended with the written consent of the Holders of at least a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding and (ii) certain Defaults may be waived with the written consent of the Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding. Subject to certain exceptions set forth in the Indenture, without the consent of any Securityholder, the Company and the Trustee may amend the Indenture or the Securities to cure any ambiguity, omission, defect or inconsistency, or to comply with Article 5 or Section 11.14 of the Indenture, to provide for uncertificated Securities in addition to or in place of certificated Securities or to make any change that does not adversely affect the rights of any Securityholder, to comply with any requirement of the SEC in connection with the qualification of the Indenture under the TIA or to add to the covenants or obligations of the Company under the Indenture or surrender any right, power or option conferred by the Indenture on the Company.

15. Defaults and Remedies.

Under the Indenture, Events of Default include (i) if the Securities have been converted to semiannual coupon notes following a Tax Event, default in the payment of interest which default continues for a period of 30 days; (ii) default in payment of the Principal Amount at Maturity (or, if the Securities have been converted to semiannual coupon notes following a Tax Event, the Restated Principal Amount), Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price or Change in Control Purchase Price, as the case may be, in respect of the Securities when the same becomes due and payable; (iii) failure by the Company to comply with other agreements in the Indenture or the Securities, subject to notice and lapse of time; (iv) default (after expiration of any applicable grace periods) under any bond, debenture, note or other evidence of indebtedness for money borrowed of the Company having an aggregate outstanding principal amount of in excess of the greater of (a) $10 million or (b) 5% of Consolidated Net Assets which default shall have resulted in such indebtedness being accelerated, without such indebtedness being discharged or such acceleration having been cured, waived, rescinded or annulled within 15 days after receipt by the Company of a Notice of Default; provided, however, that if any such failure or acceleration referred to in (a) or (b) above shall cease or be cured, waived, rescinded or annulled, then the Event of Default by reason thereof shall be deemed not to have occurred; (v) certain events of bankruptcy or insolvency; and (vi) failure by the Company to deliver shares of Common Stock or cash in lieu thereof (together with cash in lieu of fractional shares) when such Common Stock or cash (or cash in lieu of fractional shares) is required to be delivered following conversion of a Security and continuance of such Default for 10 days. If an Event of Default occurs and is continuing, the Trustee, or the Holders of at least 25% in aggregate Principal Amount at Maturity of the Securities at the time

outstanding, may declare all the Securities to be due and payable immediately. Certain events of bankruptcy or insolvency are Events of Default which will result in the Securities becoming due and payable immediately upon the occurrence of such Events of Default.

Securityholders may not enforce the Indenture or the Securities except as provided in the Indenture. The Trustee may refuse to enforce the Indenture or the Securities unless it receives reasonable indemnity or security. Subject to certain limitations, Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Securityholders notice of any continuing Default (except a Default in payment of amounts specified in clause (i) or (ii) above) if it determines that withholding notice is in their interests.

16. Subordination.

The Securities are subordinated to all existing and future Senior Indebtedness. To the extent provided in the Indenture, Senior Indebtedness must be paid before the Securities may be paid. The Indenture does not limit the present or future amount of Senior Indebtedness the Company may have. The Company agrees, and each Securityholder by accepting a Security agrees, to the subordination and authorizes the Trustee to give it effect and appoints the Trustee as attorney-in-fact for such purpose.

17. Trustee Dealings with the Company.

Subject to certain limitations imposed by the TIA, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Securities and may otherwise deal with and collect obligations owed to it by the Company or its Affiliates and may otherwise deal with the Company or its Affiliates with the same rights it would have if it were not Trustee.

18. No Recourse Against Others.

A director, officer, employee or stockholder, as such, of the Company shall not have any liability for any obligations of the Company under the Securities or the Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. By accepting a Security, each Securityholder waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.

19. Authentication.

This Security shall not be valid until an authorized officer of the Trustee manually signs the Trustee's Certificate of Authentication on the other side of this Security.

20. Abbreviations.

Customary abbreviations may be used in the name of a Securityholder or an assignee, such as TEN COM (=tenants in common), TEN ENT (=tenants by the entireties), JT TEN (=joint tenants with right of survivorship and not as tenants in common), CUST (=custodian), and U/G/M/A (=Uniform Gift to Minors Act).

21. GOVERNING LAW.

THE LAWS OF THE STATE OF NEW YORK SHALL GOVERN THE INDENTURE AND THIS SECURITY, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS.

The Company will furnish to any Securityholder upon written request and without charge a copy of the Indenture which has in it the text of this Security in larger type. Requests may be made to:

IDEC Pharmaceuticals Corporation
11011 Torreyana Road
San Diego, California 92121
Attention: Chief Financial Officer

ASSIGNMENT FORM

To assign this Security, fill in the form below:

I or we assign and transfer this Security to

- ----------

- ----------

(Insert assignee's soc. sec. or tax ID no.)

- ----------

- ----------

- ----------

(Print or type assignee's name, address and zip code)

and irrevocably appoint _____ agent to transfer this Security on the books of the Company. The agent may substitute another to act for him.

CONVERSION NOTICE

To convert this Security into Common Stock of the Company, check the box:

To convert only part of this Security, state the Principal Amount at Maturity to be converted (which must be $1,000 or an integral multiple of $1,000):

If you want the stock certificate made out in another person's name, fill in the form below:

(Insert other person's soc. sec. or tax ID no.)

(Print or type other person's name, address and zip code)

_____

Date:_____ Your Signature:_____

_____

(Sign exactly as your name appears on the other side of this Security)

EXHIBIT A-2

[Form of Certificated Security]

FOR PURPOSES OF SECTIONS 1273 AND 1275 OF THE INTERNAL REVENUE CODE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT WITH RESPECT TO EACH $1,000 OF PRINCIPAL AMOUNT AT MATURITY OF THIS SECURITY IS $662.15, THE ISSUE DATE IS FEBRUARY 16, 1999, THE YIELD TO MATURITY IS 5.5%.

IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE REGISTRAR AND TRANSFER AGENT SUCH CERTIFICATES AND OTHER INFORMATION AS SUCH TRANSFER AGENT MAY REASONABLY REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOLLOWING RESTRICTIONS.

THIS SECURITY AND THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS. NEITHER THIS SECURITY, THE SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OF THIS SECURITY NOR ANY INTEREST OR PARTICIPATION HEREIN OR THEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, REGISTRATION.

THE HOLDER OF THIS SECURITY, BY ITS ACCEPTANCE HEREOF, AGREES TO OFFER, SELL OR OTHERWISE TRANSFER SUCH SECURITY, PRIOR TO THE DATE (THE "RESALE RESTRICTION TERMINATION DATE") WHICH IS TWO YEARS AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE COMPANY OR ANY AFFILIATE OF THE COMPANY WAS THE OWNER OF ANY SECURITY (OR ANY PREDECESSOR OF SUCH SECURITY) ONLY (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, (B) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A, TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHICH NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (C) TO AN INSTITUTIONAL "ACCREDITED INVESTOR" WITHIN THE MEANING OF SUBPARAGRAPH (A)(1), (2), (3) OR (7) OF RULE 501 UNDER THE SECURITIES ACT THAT IS ACQUIRING THE SECURITY FOR ITS OWN ACCOUNT, OR FOR THE ACCOUNT OF SUCH AN INSTITUTIONAL "ACCREDITED INVESTOR," FOR INVESTMENT PURPOSES AND NOT WITH A VIEW TO, OR FOR OFFER OR SALE IN CONNECTION WITH, ANY DISTRIBUTION IN VIOLATION OF THE SECURITIES ACT,

(D) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, OR (E) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE COMPANY'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER, PURSUANT TO CLAUSE (C) OR (E) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM, AND IN EACH OF THE FOREGOING CASES, A CERTIFICATE OF TRANSFER IN THE FORM APPEARING ON THE OTHER SIDE OF THIS SECURITY IS COMPLETED AND DELIVERED BY THE TRANSFEROR TO THE TRUSTEE. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE.

[THE FOREGOING LEGEND MAY BE REMOVED FROM THIS SECURITY ON SATISFACTION OF THE CONDITIONS SPECIFIED IN THE INDENTURE.]

IDEC PHARMACEUTICALS CORPORATION

Liquid Yield Option(TM) Note due 2019
(Zero Coupon-Subordinated)

No. R-
CUSIP:
Issue Date: February 16, 1999
Original Issue Discount: $662.15
Issue Price: $337.85
(for each $1,000 Principal Amount at Maturity)
(for each $1,000 Principal Amount at Maturity)

IDEC PHARMACEUTICALS CORPORATION, a Delaware corporation, promises to pay to _____ or registered assigns, the Principal Amount at Maturity of _____ Dollars on February 16, 2019.

This Security shall not bear interest except as specified on the other side of this Security. Original Issue Discount will accrue as specified on the other side of this Security. This Security is convertible as specified on the other side of this Security.

Additional provisions of this Security are set forth on the other side of this Security.

Dated: IDEC PHARMACEUTICALS CORPORATION

By

Title:

Attest:

Title:

TRUSTEE'S CERTIFICATE OF
AUTHENTICATION

CHASE MANHATTAN BANK
AND TRUST COMPANY, NATIONAL ASSOCIATION

as Trustee, certifies that this is one of the Securities referred to in the within-mentioned Indenture.

By

Authorized Signatory

Dated:

[FORM OF REVERSE SIDE OF LYON]

Liquid Yield Option(TM) Note Due 2019
(Zero Coupon-Subordinated)

1. Interest.

This Security shall not bear interest, except as specified in this paragraph or in paragraph 10 hereof. If the Principal Amount at Maturity hereof or any portion of such Principal Amount at Maturity is not paid when due (whether upon acceleration pursuant to Section 6.02 of the Indenture, upon the date set for payment of the Redemption Price pursuant to paragraph 5 hereof, upon the date set for payment of the Purchase Price or Change in Control Purchase Price pursuant to paragraph 6 hereof or upon the Stated Maturity of this Security) or if interest due hereon or any portion of such interest is not paid when due in accordance with paragraph 10 hereof, then in each such case the overdue amount shall, to the extent permitted by law, bear interest at the rate of 5.5% per annum, compounded semiannually, which interest shall accrue from the date such overdue amount was originally due to the date payment of such amount, including interest thereon, has been made or duly provided for. All such interest shall be payable on demand. The accrual of such interest on overdue amounts shall be in lieu of, and not in addition to, the continued accrual of Original Issue Discount.

Original Issue Discount (the difference between the Issue Price and the Principal Amount at Maturity of the Security), in the period during which a Security remains outstanding, shall accrue at 5.5% per annum, on a semiannual bond equivalent basis using a 360-day year composed of twelve 30-day months, from the Issue Date of this Security.

2. Method of Payment.

Subject to the terms and conditions of the Indenture, the Company will make payments in respect of Redemption Prices, Purchase Prices, Change in Control Purchase Prices and at Stated Maturity to Holders who surrender Securities to a Paying Agent to collect such payments in respect of the Securities. The Company will pay cash amounts in money of the United States that at the time of payment is legal tender for payment of public and private debts. However, the Company may make such cash payments by check payable in such money.

3. Paying Agent; Conversion Agent and Registrar.

Initially, Chase Manhattan Bank and Trust Company, National Association, a national banking association organized under the laws of the United States (the "Trustee"), will act as Paying Agent, Conversion Agent and Registrar. The Company may appoint and change any Paying Agent, Conversion Agent, Registrar or co-registrar without notice, other than notice to the Trustee except that the Company will maintain at least one Paying Agent in the State of

New York, City of New York, Borough of Manhattan, which shall initially be an office or agency of the Trustee. The Company or any of its Subsidiaries or any of their Affiliates may act as Paying Agent, Conversion Agent, Registrar or co-registrar.

4. Indenture.

The Company issued the Securities under an Indenture dated as of February 16, 1999 (the "Indenture"), between the Company and the Trustee. The terms of the Securities include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939, as in effect from time to time (the "TIA"). Capitalized terms used herein and not defined herein have the meanings ascribed thereto in the Indenture. The Securities are subject to all such terms , and Securityholders are referred to the Indenture and the TIA for a statement of those terms.

The Securities are general unsecured obligations of the Company limited to $345,000,000 aggregate Principal Amount at Maturity (subject to Section 2.07 of the Indenture). The Indenture does not limit other indebtedness of the Company, secured or unsecured.

5. Redemption at the Option of the Company.

No sinking fund is provided for the Securities. The Securities are redeemable as a whole, or from time to time in part, at any time at the option of the Company at the Redemption Prices set forth below, provided that the Securities are not redeemable prior to February 16, 2004.

The table below shows Redemption Prices of a Security per $1,000 Principal Amount at Maturity on the dates shown below and at Stated Maturity, which prices reflect accrued Original Issue Discount calculated to each such date. The Redemption Price of a Security redeemed between such dates shall include an additional amount reflecting the additional Original Issue Discount accrued since the next preceding date in the table.

Redemption Date	(1) LYON Issue Price	(2) Accrued Original Issue Discount at 5.5%	(3) Redemption Price (1) + (2)
February 16, 2004	$ 337.85	$ 105.29	$ 443.14
February 16, 2005	337.85	130.00	467.85
February 16, 2006	337.85	156.09	493.94
February 16, 2007	337.85	183.63	521.48
February 16, 2008	337.85	212.70	550.55
February 16, 2009	337.85	243.40	581.25
February 16, 2010	337.85	275.81	613.66
February 16, 2011	337.85	310.02	647.87
February 16, 2012	337.85	346.15	684.00
February 16, 2013	337.85	384.28	722.13
February 16, 2014	337.85	424.55	762.40
February 16, 2015	337.85	467.06	804.91
February 16, 2016	337.85	511.93	849.78
February 16, 2017	337.85	559.32	897.17
February 16, 2018	337.85	609.34	947.19
At Stated Maturity	337.85	662.15	$1,000.00

If converted to a semiannual coupon note following the occurrence of a Tax Event, this Security will be redeemable at the Restated Principal Amount plus accrued and unpaid interest from the date of such conversion through the Redemption Date; but in no event will this Security be redeemable before February 16, 2004.

6. Purchase by the Company at the Option of the Holder.

Subject to the terms and conditions of the Indenture, the Company shall become obligated to purchase, at the option of the Holder, the Securities held by such Holder on the following Purchase Dates and at the following Purchase Prices per $1,000 Principal Amount at Maturity, upon delivery of a Purchase Notice containing the information set forth in the Indenture at any time from the opening of business on the date that is 20 Business Days prior to such Purchase Date until the close of business on such Purchase Date and upon delivery of the Securities to the Paying Agent by the Holder as set forth in the Indenture.

Purchase Date	Purchase Price
February 16, 2004	$443.14
February 16, 2009	$581.25

Purchase Date	Purchase Price
February 16, 2014	$762.40

The Purchase Price (equal to the Issue Price plus accrued Original Issue Discount to the Purchase Date) may be paid, at the option of the Company, in cash or by the issuance and delivery of shares of Common Stock of the Company, or in any combination thereof.

If prior to a Purchase Date this Security has been converted to a semiannual coupon note following the occurrence of a Tax Event, the Purchase Price will be equal to the Restated Principal Amount plus accrued and unpaid interest from the date of conversion to the Purchase Date.

At the option of the Holder and subject to the terms and conditions of the Indenture, the Company shall become obligated to purchase the Securities held by such Holder 35 Business Days after the occurrence of a Change in Control of the Company occurring on or prior to February 16, 2004 for a Change in Control Purchase Price equal to the Issue Price plus accrued Original Issue Discount to the Change in Control Purchase Date, which Change in Control Purchase Price shall be paid in cash. If prior to a Change in Control Purchase Date this Security has been converted to a semiannual coupon note following the occurrence of a Tax Event, the Change in Control Purchase Price shall be equal to the Restated Principal Amount plus accrued and unpaid interest from the date of conversion to the Change in Control Purchase Date.

Holders have the right to withdraw any Purchase Notice or Change in Control Purchase Notice, as the case may be, by delivering to the Paying Agent a written notice of withdrawal in accordance with the provisions of the Indenture.

If cash (and/or securities if permitted under the Indenture) sufficient to pay the Purchase Price or Change in Control Purchase Price, as the case may be, of all Securities or portions thereof to be purchased as of the Purchase Date or the Change in Control Purchase Date, as the case may be, is deposited with the Paying Agent on the Business Day following the Purchase Date or the Change in Control Purchase Date, as the case may be, Original Issue Discount ceases to accrue on such Securities (or portions thereof) immediately after such Purchase Date or Change in Control Purchase Date, as the case may be, and the Holder thereof shall have no other rights as such (other than the right to receive the Purchase Price or Change in Control Purchase Price, as the case may be, upon surrender of such Security).

7. Notice of Redemption.

Notice of redemption will be mailed at least 30 days but not more than 60 days before the Redemption Date to each Holder of Securities to be redeemed at the Holder's registered address. If money sufficient to pay the Redemption Price of all Securities (or portions thereof) to be redeemed on the Redemption Date is deposited with the Paying Agent prior to or on the Redemption Date, immediately after such Redemption Date original issue Discount ceases

to accrue on such Securities or portions thereof. Securities in denominations larger than $1,000 of Principal Amount at Maturity may be redeemed in part but only in integral multiples of $1,000 of Principal Amount at Maturity.

8. Conversion.

Subject to the next two succeeding sentences, a Holder of a Security may convert it into Common Stock of the Company at any time before the close of business on February 16, 2019. If the Security is called for redemption, the Holder may convert it at any time before the close of business on the Redemption Date. A security in respect of which a Holder has delivered a Purchase Notice or Change in Control Purchase Notice exercising the option of such Holder to require the Company to purchase such Security may be converted only if such notice of exercise is withdrawn in accordance with the terms of the Indenture.

The initial Conversion Rate is 6.734 shares of Common Stock per $1,000 Principal Amount at Maturity, subject to adjustment in certain events described in the Indenture. The Company will deliver cash or a check in lieu of any fractional share of Common Stock.

In the event the Company exercises its option pursuant to Section 10.01 of the Indenture to have interest in lieu of Original Issue Discount accrue on the Security following a Tax Event, the Holder will be entitled on conversion to receive the same number of shares of Common Stock such Holder would have received if the Company had not exercised such option. If the Company exercises such option, Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business of such Interest Payment Date (except Securities to be redeemed on a date within such period) must be accompanied by payment of an amount equal to the interest thereon that the registered Holder is to receive. Except where Securities surrendered for conversion must be accompanied by payment as described above, no interest on converted Securities will be payable by the Company on any Interest Payment Date subsequent to the date of conversion.

To convert a Security, a Holder must (1) complete and manually sign the conversion notice below (or complete and manually sign a facsimile of such notice) and deliver such notice to the Conversion Agent, (2) surrender the Security to the Conversion Agent, (3) furnish appropriate endorsements and transfer documents if required by the Conversion Agent, the Company or the Trustee and (4) pay any transfer or similar tax, if required.

A Holder may convert a portion of a Security if the Principal Amount at Maturity of such portion in $1,000 or an integral multiple of $1,000. No payment or adjustment will be made for dividends on the Common Stock except as provided in the Indenture. On conversion of a Security, that portion of accrued Original Issue Discount (or interest if the Company has exercised its option provided for in paragraph 10 hereof) attributable to the period from the Issue Date (or, if the Company has exercised the option referred to in paragraph 10 hereof, the later of

(x) the date of such exercise and (y) the date on which interest was last paid) through the Conversion Date with respect to the converted Security shall not be cancelled, extinguished or forfeited, but rather shall be deemed to be paid in full to the Holder thereof through the delivery of the Common Stock (together with the cash payment, if any, in lieu of fractional shares) in exchange for the Security being converted pursuant to the terms hereof; and the fair market value of such shares of Common Stock (together with any such cash payment in lieu of fractional shares) shall be treated as issued, to the extent thereof, first in exchange for Original Issue Discount (or interest, if the Company has exercised its option provided for in paragraph 10 hereof) accrued through the Conversion Date, and the balance, if any, of such fair market value of such Common Stock (and any such cash payment) shall be treated as issued in exchange for the Issue Price of the Security being converted pursuant to the provisions hereof.

The Conversion Rate will be adjusted for dividends or distributions on Common Stock payable in Common Stock or other Capital Stock; subdivisions, combinations or certain reclassifications of Common Stock; distributions to all holders of Common Stock of certain rights to purchase Common Stock for a period expiring within 60 days at less than the Quoted Price at the Time of Determination; and distributions to such holders of assets or debt securities of the Company or certain rights to purchase securities of the Company (excluding certain cash dividends or distributions). However, no adjustment need be made if Securityholders may participate in the transaction or in certain other cases. The Company from time to time may voluntarily increase the Conversion Rate.

If the Company is a party to a consolidation, merger or binding share exchange or a transfer of all or substantially all of its assets, or upon certain distributions described in the Indenture, the right to convert a Security into Common Stock may be changed into a right to convert it into securities, cash or other assets of the Company or another person.

9. Conversion Arrangement on Call for Redemption.

Any Securities called for redemption, unless surrendered for conversion before the close of business on the Redemption Date, may be deemed to be purchased from the Holders of such Securities at an amount not less than the Redemption Price, by one or more investment bankers or other purchasers who may agree with the Company to purchase such Securities from the Holders, to convert them into Common Stock of the Company and to make payment for such Securities to the Trustee in trust for such Holders.

10. Tax Event.

(a) From and after (i) the date (the "Tax Event Date") of the occurrence of a Tax Event and (ii) the date the Company exercises such option, whichever is later (the "Option Exercise Date"), at the option of the Company, interest in lieu of future Original Issue Discount shall accrue at the rate of 5.5% per annum on a principal amount per Security (the "Restated Principal Amount") equal to the Issue Price plus Original Issue Discount accrued through the

Option Exercise Date and shall be payable semiannually on February 16 and August 16 of each year (each an "Interest Payment Date") to holders of record at the close of business on February 1 or August 1 (each a "Regular Record Date") immediately preceding such interest Payment Date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months and will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from the Option Exercise Date.

(b) Interest on any Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the person in whose name that Security is registered at the close of business on the Regular Record Date for such interest at the office or agency of the Company maintained for such purpose. Each installment of interest on any Security shall be paid in same-day funds by transfer to an account maintained by the payee located inside the United States.

(c) Except as otherwise specified with respect to the Securities, any Defaulted Interest on any Security shall forthwith cease to be payable to the registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company as provided for in Section 10.02(b) of the Indenture.

11. Denominations; Transfer; Exchange.

The Securities are in fully registered form, without coupons, in denominations of $1,000 of Principal Amount at Maturity and integral multiples of $1,000. A Holder may transfer or exchange Securities in accordance with the Indenture. The Registrar may require a Holder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Indenture. The Registrar need not transfer or exchange any Securities selected for redemption (except, in the case of a Security to be redeemed in part, the portion of the Security not to be redeemed) or any Securities in respect of which a Purchase Notice or Change in Control Purchase Notice has been given and not withdrawn (except, in the case of a Security to be purchased in part, the portion of the Security not to be purchased) or any Securities for a period of 15 days before a selection of Securities to be redeemed.

12. Persons Deemed Owners.

The registered Holder of this Security may be treated as the owner of this Security for all purposes.

13. Unclaimed Money or Securities.

The Trustee and the Paying Agent shall return to the Company upon written request any money or securities held by them for the payment of any amount with respect to the Securities that remains unclaimed for two years after deposit of such money or securities with the

Trustee or the Paying Agent, subject to applicable unclaimed property law. After return to the Company, Holders entitled to the money or securities must look to the Company for payment as general creditors unless an applicable abandoned property law designate another person.

14. Amendment; Waiver.

Subject to certain exceptions set forth in the Indenture, (i) the Indenture or the Securities may be amended with the written consent of the Holders of at least a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding and (ii) certain Defaults may be waived with the written consent of the Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding. Subject to certain exceptions set forth in the Indenture, without the consent of any Securityholder, the Company and the Trustee may amend the Indenture or the Securities to cure any ambiguity, omission, defect or inconsistency, or to comply with Article 5 or Section 11.14 of the Indenture, to provide for uncertificated Securities in addition to or in place of certificated Securities or to make any change that does not adversely affect the rights of any Securityholder, to comply with any requirement of the SEC in connection with the qualification of the Indenture under the TIA or to add to the covenants or obligations of the Company under the Indenture or surrender any right, power or option conferred by the Indenture on the Company.

15. Defaults and Remedies.

Under the Indenture, Events of Default include (i) if the Securities have been converted to semiannual coupon notes following a Tax Event, default in the payment of interest which default continues for a period of 30 days; (ii) default in payment of the Principal Amount at Maturity (or, if the Securities have been converted to semiannual coupon notes following a Tax Event, the Restated Principal Amount), Issue Price plus accrued Original Issue Discount, Redemption Price, Purchase Price or Change in Control Purchase Price, as the case may be, in respect of the Securities when the same becomes due and payable; (iii) failure by the Company to comply with other agreements in the Indenture or the Securities, subject to notice and lapse of time; (iv) default (after expiration of any applicable grace periods) under any bond, debenture, note or other evidence of indebtedness for money borrowed of the Company having an aggregate outstanding principal amount of in excess of the greater of (a) $10 million or (b) 5% of Consolidated Net Assets, which default shall have resulted in such indebtedness being accelerated, without such indebtedness being discharged or such acceleration having been cured, waived, rescinded or annulled within 15 days after receipt by the Company of Notice of Default; provided, however, that if any such failure or acceleration referred to in (a) or (b) above shall cease or be cured, waived, rescinded or annulled, then the Event of Default by reason thereof shall be deemed not to have occurred; (v) certain events of bankruptcy or insolvency; and (vi) failure by the Company to deliver shares of Common Stock or cash in lieu thereof (together with cash in lieu of fractional shares) unless such Common Stock or cash (or cash in lieu of fractional shares) is required to be delivered following conversion of a Security and continuance of such Default for 10 days. If an Event of Default occurs and is continuing, the Trustee, or the

Holders of at least 25% in aggregate Principal Amount at Maturity of the Securities at the time outstanding, may declare all the Securities to be due and payable immediately. Certain events of bankruptcy or insolvency are Events of Default which will result in the Securities becoming due and payable immediately upon the occurrence of such Events of Default.

Securityholders may not enforce the Indenture or the Securities except as provided in the Indenture. The Trustee may refuse to enforce the Indenture or the Securities unless it receives reasonable indemnity or security. Subject to certain limitations, Holders of a majority in aggregate Principal Amount at Maturity of the Securities at the time outstanding may direct the Trustee in its exercise of any trust or power. The Trustee may withhold from Securityholders notice of any continuing Default (except a Default in payment of amounts specified in clause (i) or (ii) above) if it determines that withholding notice is in their interests.

16. Subordination.

The Securities are subordinated to all existing and future Senior Indebtedness. To the extent provided in the Indenture, Senior Indebtedness must be paid before the Securities may be paid. The Indenture does not limit the present or future amount of Senior Indebtedness the Company may have. The Company agrees, and each Securityholder by accepting a Security agrees, to the subordination and authorizes the Trustee to give it effect and appoints the Trustee as attorney-in-fact for such purpose.

17. Trustee Dealings with the Company.

Subject to certain limitations imposed by the TIA, the Trustee under the Indenture, in its individual or any other capacity, may become the owner or pledgee of Securities and may otherwise deal with and collect obligations owed to it by the Company or its Affiliates and may otherwise deal with the Company or its Affiliates with the same rights it would have if it were not Trustee.

18. No Recourse Against Others.

A director, officer, employee or stockholder, as such, of the Company shall not have any liability for any obligations of the Company under the Securities or the Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. By accepting a Security, each Securityholder waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.

19. Authentication.

This Security shall not be valid until an authorized officer of the Trustee manually signs the Trustee's Certificate of Authentication on the other side of this Security.

20. Abbreviations.

Customary abbreviations may be used in the name of a Securityholder or an assignee, such as TEN COM (=tenants in common), TEN ENT (=tenants by the entireties), JT TEN (=joint tenants with right of survivorship and not as tenants in common), CUST (=custodian), and U/G/M/A (=Uniform Gift to Minors Act).

21. GOVERNING LAW.

THE LAWS OF THE STATE OF NEW YORK SHALL GOVERN THE INDENTURE AND THIS SECURITY, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS.

The Company will furnish to any Securityholder upon written request and without charge a copy of the Indenture which has in it the text of this Security in larger type. Requests may be made to:

IDEC Pharmaceuticals Corporation
11011 Torreyama Road
San Diego, California 92121
Attention: Chief Financial Officer

ASSIGNMENT FORM

To assign this Security, fill in the form below:

I or we assign and transfer this Security to

- ----------

- ----------

(Insert assignee's soc. sec. or tax ID no.)

- ----------

- ----------

- ----------

(Print or type assignee's name, address and zip code)

and irrevocably appoint _____ agent to transfer this Security on the books of the Company. The agent may substitute another to act for him.

CONVERSION NOTICE

To convert this Security into Common Stock of the Company, check the box:

To convert only part of this Security, state the Principal Amount at Maturity to be converted (which must be $1,000 or an integral multiple of $1,000):

If you want the stock certificate made out in another person's name, fill in the form below:

(Insert other person's soc. sec. or tax ID no.)

(Print or type other person's name, address and zip code)

_____

Date:_____ Your Signature:_____

_____

(Sign exactly as your name appears on the other side of this Security)

EXHIBIT B-1

TRANSFER CERTIFICATE

In connection with any transfer of any of the Securities within the period prior to the expiration of the holding period applicable to the sales thereof under Rule 144(k) under the Securities Act of 1933, as amended (the "Securities Act") (or any successor provision), the undersigned registered owner of this Security hereby certifies with respect to $_____ Principal Amount at Maturity of the above-captioned securities presented or surrendered on the date hereof (the "Surrendered Securities") for registration of transfer, or for exchange or conversion where the securities issuable upon such exchange or conversion are to be registered in a name other than that of the undersigned registered owner (each such transaction being a "transfer"), that such transfer complies with the restrictive legend set forth on the face of the Surrendered Securities for the reason checked below:

[ ] The transfer of the Surrendered Securities complies with Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"); or

[ ] The transfer of the Surrendered Securities complies with Rule 144A under the Securities Act; or

[ ] The transfer of the Surrendered Securities is to an institutional accredited investor, as described in Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act; or

[ ] The transfer of the Surrendered Securities is pursuant to an effective registration statement under the Securities Act.

and unless the box below is checked, the undersigned confirms that, to the undersigned's knowledge, such Securities are not being transferred to an "affiliate" of the Company as defined in Rule 144 under the Securities Act (an "Affiliate").

[ ] The transferee is an Affiliate of the Company.

DATE:

Signature(s)

(If the registered owner is a corporation, partnership or fiduciary, the title of the Person signing on behalf of such registered owner must be stated.)

EXHIBIT B-2

Form of Letter to be Delivered by Accredited Investors

IDEC Pharmaceuticals Corporation
3030 Callan Road
San Diego, California 92121

Chase Manhattan Bank
and Trust Company, National Association
101 California Street
Suite 2725
San Francisco, CA 94111

Dear Sirs:

We are delivering this letter in connection with the proposed transfer of $_____ Principal Amount at Maturity of the Liquid Yield Option Notes due 2019 ("LYONs") of IDEC Pharmaceuticals Corporation (the "Company"), which are convertible into shares of the Company's Common Stock, $0.001 par value per share (the "Common Stock").

We hereby confirm that:

(i) we are an "accredited investor" within the meaning of Rule 501(a)(1), (2) or (3) under the Securities Act of 1933, as amended (the "Securities Act"), or an entity in which all of the equity owners are accredited investors within the meaning of Rule 501(a)(1), (2) or (3) under the Securities Act (an "Institutional Accredited Investor");

(ii) (A) the purchase of LYONs by us is for our own account or for the account of one or more other Institutional Accredited Investors or as fiduciary for the account of one or more trusts, each of which is an "accredited investor" within the meaning of Rule 501(a)(7) under the Securities Act and for each of which we exercise sole investment discretion or (B) we are a "bank," within the meaning of Section 3(a)(2) of the Securities Act, or a "savings and loan association" or other institution described in Section 3(a)(5)(A) of the Securities Act that is acquiring LYONs as fiduciary for the account of one or more institutions for which we exercise sole investment discretion;

(iii) in the event that we purchase any LYONs, we will acquire LYONs having a minimum principal amount at maturity of not less than $250,000 for our own account or for any separate account for which we are acting;

(iv) we have such knowledge and experience in financial and business matters that we are capable of evaluating the merits and risks of purchasing LYONs.

(v) we are not acquiring LYONs with a view to distribution thereof or with any present intention of offering or selling LYONs or the shares of Common Stock issuable upon conversion thereof, except as permitted below; provided that the disposition of our property and property of any accounts for which we are acting as fiduciary shall remain at all times within our control; and

(vi) we have received a copy of the Offering Memorandum and acknowledge that we have had access to financial and other information, and have been afforded the opportunity to ask such questions of representatives of the Company and receive answers thereto, as we deem necessary in connection with our decision to purchase LYONs.

We understand that the LYONs are being offered in a transaction not involving any public offering within the United States within the meaning of the Securities Act and that the LYONs and the shares of Common Stock (the "Securities") issuable upon conversion thereof have not been registered under the Securities Act, and we agree, on our own behalf and on behalf of each account for which we acquire any LYONs, that if in the future we decide to resell or otherwise transfer such Securities prior to the date (the "Resale Restriction Termination Date") which is two years after the later of the original issuance hereof and the last date on which the Company or an affiliate of the Company was the owner of the Security, such Securities may be resold or otherwise transferred only (i) to IDEC Pharmaceuticals Corporation or any subsidiary thereof, or (ii) for as long as the LYONs are eligible for resale pursuant to Rule 144A, to a person it reasonably believes is a "qualified institutional buyer" (as defined in Rule 144A under the Securities Act) that purchases for its own account or for the account of a qualified institutional buyer to which notice is given that the transfer is being made in reliance on Rule 144A, or (iii) to an Institutional Accredited Investor that is acquiring the Security for its own account, or for the account of such Institutional Accredited Investor for investment purposes and not with a view to, or for offer or sale in connection with, any distribution in violation of the Securities Act, or (iv) pursuant to another available exemption from registration under the Securities Act (if applicable), or (v) pursuant to a registration statement which has been declared effective under the Securities Act and, in each case, in accordance with any applicable securities laws of any State of the United States or any other applicable jurisdiction and in accordance with the legends set forth on the Securities. We further agree to provide any person purchasing any of the Securities other than pursuant to clause (v) above from us a notice advising such purchaser that resales of such securities are restricted as stated herein. We understand that the trustee or the transfer agent, as the case may be, for the Securities will not be required to accept for registration of transfer any Securities pursuant to (iii) or (iv) above except upon presentation of evidence satisfactory to the Company that the foregoing restrictions on transfer have been complied with. We further understand that any Securities will be in the form of definitive physical certificates and that such certificates will bear a legend reflecting the substance of this paragraph other than certificates representing Securities transferred pursuant to clause (v) above.

We acknowledge that the Company, others and you will rely upon our confirmations, acknowledgments and agreements set forth herein, and we agree to notify you promptly in writing if any of our representations or warranties herein ceases to be accurate and complete.

THIS LETTER SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK.

(Name of Purchaser)

By:

Name:
Title:
Address:

Exhibit 23.0

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

INDEPENDENT AUDITORS' REPORT ON SCHEDULE AND CONSENT

The Board of Directors
IDEC Pharmaceuticals Corporation:

The audits referred to in our report dated February 2, 1999, except as to Note 11, which is as of March 1, 1999, included the related financial statement schedule as of December 31, 1998, and for each of the years in the three-year period ended December 31, 1998, included in the 1998 Annual Report on Form 10-K. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this financial statement schedule based on our audits. In our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We consent to incorporation by reference in registration statements Nos. 333-2969 and 33-62817 on Forms S-8 of IDEC Pharmaceuticals Corporation of our report dated February 2, 1999, except as to Note 11, which is as of March 1, 1999, relating to the consolidated balance sheets of IDEC Pharmaceuticals Corporation and subsidiary as of December 31, 1998 and 1997, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 1998, and the related schedule, which report appears in the 1998 Annual Report on Form 10-K of IDEC Pharmaceuticals Corporation.

KPMG LLP

San Diego, California
March 30, 1999

Exhibit 23.1

SCHEDULE II

IDEC PHARMACEUTICALS CORPORATION AND SUBSIDIARY

VALUATION AND QUALIFYING ACCOUNTS
(In thousands)

Years Ended December 31, 1998, 1997 and 1996

Description	Balance beginning of year	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions	Balance at End of Year
Year ended December 31, 1998					
Inventory reserve	$ 2,082	$ 3,402	$ --	$(3,630)	$ 1,854
Allowance for contract revenue receivables	51	724	--	--	775
	$ 2,133	$ 4,126	$ --	$(3,630)	$ 2,629
Year ended December 31, 1997					
Inventory reserve	$ --	$ 2,082	$ --	$ --	$ 2,082
Allowance for contract revenue receivables	1,681	--	--	(1,630)	51
	$ 1,681	$ 2,082	$ --	$(1,630)	$ 2,133
Year ended December 31, 1996					
Allowance for contract revenue receivables	$ 658	$ --	$ 1,423	$ (400)	$ 1,681
	$ 658	$ --	$ 1,423	$ (400)	$ 1,681

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED BALANCE SHEETS AND CONSOLIDATED STATEMENTS OF OPERATIONS CONTAINED IN EXHIBIT 13.3 OF THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 1997 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIALS STATEMENTS AND THE NOTES THERETO.

1,000

12-MOS
DEC-31-1998
JAN-01-1998
DEC-31-1998
26,929
46,573
2,345
775
5,346
101,027
34,440
16,543
125,273
14,483
0
0
0
0
20
106,408
106,428
0
86,959
0
51,087
0
0
630
21,900
422
0
0
0
0
0
21,478
1.08
.92