

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON D.C. 20549  
FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2000

OR

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

Commission file number 000-12477

AMGEN INC.  
(Exact name of registrant as specified in its charter)

Delaware

95-3540776

-----  
(State or other jurisdiction of  
incorporation or organization)

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

One Amgen Center Drive, Thousand Oaks, California

91320-1799

-----  
(Address of principal executive offices)

-----  
(Zip Code)

Registrant's telephone number, including area code: (805) 447-1000

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

As of June 30, 2000, the registrant had 1,028,267,140 shares of Common Stock, \$0.0001 par value, outstanding.

AMGEN INC.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

The information in this report for the three and six months ended June 30, 2000 and 1999 is unaudited but includes all adjustments (consisting only of normal recurring accruals, unless otherwise indicated) which Amgen Inc. ("Amgen" or the "Company") considers necessary for a fair presentation of the results of operations for those periods.

The condensed consolidated financial statements should be read in conjunction with the Company's financial statements and the notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 1999.

Interim results are not necessarily indicative of results for the full fiscal year.

AMGEN INC.  
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except per share data)  
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2000	1999	2000	1999
Revenues:				
Product sales	\$ 806.8	\$ 737.9	\$1,504.4	\$1,426.2
Corporate partner revenues	61.1	49.0	135.3	76.0
Royalty income	46.5	33.6	88.8	63.8
Total revenues	914.4	820.5	1,728.5	1,566.0
Operating expenses:				
Cost of sales	101.7	98.8	187.4	191.2
Research and development	202.8	194.1	392.6	382.1
Selling, general and administrative	205.1	157.2	374.8	290.1
Loss of affiliates, net	4.9	9.2	21.3	12.0
Total operating expenses	514.5	459.3	976.1	875.4
Operating income	399.9	361.2	752.4	690.6
Other income (expense):				
Interest and other income	43.2	24.5	79.6	43.0
Interest expense, net	(3.4)	(3.3)	(7.6)	(5.5)
Total other income	39.8	21.2	72.0	37.5
Income before income taxes	439.7	382.4	824.4	728.1
Provision for income taxes	137.1	114.8	255.6	213.3
Net income	\$ 302.6	\$ 267.6	\$ 568.8	\$ 514.8
Earnings per share:				
Basic	\$ 0.29	\$ 0.26	\$ 0.55	\$ 0.50
Diluted	\$ 0.28	\$ 0.25	\$ 0.52	\$ 0.48
Shares used in calculation of earnings per share:				
Basic	1,027.5	1,021.1	1,025.4	1,022.3
Diluted	1,083.3	1,073.8	1,084.6	1,077.4

See accompanying notes.

AMGEN INC.  
CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions, except per share data)  
(Unaudited)

	June 30, 2000	December 31, 1999
	-----	-----
<b>ASSETS</b>		
-----		
Current assets:		
Cash and cash equivalents	\$ 136.2	\$ 130.9
Marketable securities	1,484.9	1,202.1
Trade receivables, net	312.3	412.2
Inventories	272.6	184.3
Other current assets	176.6	135.8
	-----	-----
Total current assets	2,382.6	2,065.3
	-----	-----
Property, plant and equipment at cost, net	1,638.5	1,553.6
Investments in affiliated companies	120.9	132.8
Other equity investments	238.4	129.7
Other assets	162.8	196.2
	-----	-----
	\$4,543.2	\$4,077.6
	=====	=====
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
-----		
Current liabilities:		
Accounts payable	\$ 120.1	\$ 83.4
Commercial paper	99.7	99.5
Accrued liabilities	616.1	648.2
	-----	-----
Total current liabilities	835.9	831.1
Long-term debt	223.0	223.0
Contingencies		
Stockholders' equity:		
Preferred stock; \$0.0001 par value; 5.0 shares authorized; none issued or outstanding	-	-
Common stock and additional paid-in capital; \$0.0001 par value; 2,750.0 shares authorized; outstanding - 1,028.3 shares in 2000 and 1,017.9 shares in 1999	2,409.1	2,072.3
Retained earnings	1,049.7	966.0
Accumulated other comprehensive income (loss)	25.5	(14.8)
	-----	-----
Total stockholders' equity	3,484.3	3,023.5
	-----	-----
	\$4,543.2	\$4,077.6
	=====	=====

See accompanying notes.

AMGEN INC.  
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)  
(Unaudited)

	Six Months Ended June 30,	
	2000	1999
Cash flows from operating activities:		
Net income	\$ 568.8	\$ 514.8
Depreciation and amortization	103.8	89.2
Gain on equity investments	(30.2)	-
Loss of affiliates, net	21.3	12.0
Cash provided by (used in):		
Trade receivables, net	99.9	(43.7)
Inventories	(88.3)	(11.0)
Other current assets	(23.6)	3.7
Accounts payable	36.7	22.4
Accrued liabilities	(32.1)	(22.3)
Net cash provided by operating activities	656.3	565.1
Cash flows from investing activities:		
Purchases of property, plant and equipment	(188.7)	(147.0)
Proceeds from maturities of marketable securities	-	10.5
Proceeds from sales of marketable securities	337.7	373.3
Purchases of marketable securities	(619.4)	(494.0)
Other	(11.6)	(2.0)
Net cash used in investing activities	(482.0)	(259.2)
Cash flows from financing activities:		
Repayment of long-term debt	-	(6.0)
Net proceeds from issuance of common stock upon the exercise of employee stock options in connection with an employee stock purchase plan	175.5	131.6
Tax benefits related to employee stock options	161.2	66.9
Repurchases of common stock	(485.1)	(470.7)
Other	(20.6)	(29.2)
Net cash used in financing activities	(169.0)	(307.4)
Increase (decrease) in cash and cash equivalents	5.3	(1.5)
Cash and cash equivalents at beginning of period	130.9	201.1
Cash and cash equivalents at end of period	\$ 136.2	\$ 199.6

See accompanying notes.

AMGEN INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

June 30, 2000

1. Summary of significant accounting policies

Business

Amgen Inc. ("Amgen" or the "Company") is a global biotechnology company that discovers, develops, manufactures and markets human therapeutics based on advances in cellular and molecular biology.

Principles of consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries as well as affiliated companies for which the Company has a controlling financial interest and exercises control over their operations ("majority controlled affiliates"). All material intercompany transactions and balances have been eliminated in consolidation. Investments in affiliated companies which are 50% or less owned and where the Company exercises significant influence over operations are accounted for using the equity method. All other equity investments are accounted for under the cost method. The caption "Loss of affiliates, net" includes Amgen's equity in the operating results of affiliated companies and the minority interest others hold in the operating results of Amgen's majority controlled affiliates.

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 consist of currently marketed products and product candidates which the Company expects to commercialize. The inventory balance of such product candidates totaled \$75.3 million and \$20.3 million as of June 30, 2000 and December 31, 1999, respectively. Inventories are shown net of applicable reserves and allowances. Inventories consist of the following (in millions):

	June 30, 2000	December 31, 1999
	-----	-----
Raw materials	\$ 45.4	\$ 37.5
Work in process	178.6	96.6
Finished goods	48.6	50.2
	-----	-----
	\$272.6	\$184.3
	=====	=====

## Product sales

Product sales primarily consist of sales from EPOGEN(R) (Epoetin alfa) and NEUPOGEN(R) (Filgrastim).

The Company has the exclusive right to sell Epoetin alfa for dialysis, diagnostics and all non-human uses in the United States. The Company sells Epoetin alfa under the brand name EPOGEN(R). Amgen has granted to Ortho Pharmaceutical Corporation (which has assigned its rights under the product license agreement to Ortho Biotech, Inc.), a subsidiary of Johnson & Johnson ("Johnson & Johnson"), a license relating to Epoetin alfa for sales in the United States for all human uses except dialysis and diagnostics. Pursuant to this license, Amgen does not recognize product sales it makes into the exclusive market of Johnson & Johnson and does recognize the product sales made by Johnson & Johnson into Amgen's exclusive market. Sales in Amgen's exclusive market and adjustments thereto are derived from Company shipments and from third-party data on shipments to end users and their usage (see Note 6, "Contingencies - Johnson & Johnson arbitrations"). Sales of the Company's other products are recognized when shipped and title has passed.

## Foreign currency transactions

The Company has a program to manage foreign currency risk. As part of this program, it has purchased foreign currency option and forward contracts to hedge against possible reductions in values of certain anticipated foreign currency cash flows generally over the next 12 months, primarily resulting from its sales in Europe. At June 30, 2000, the Company had option and forward contracts to exchange foreign currencies for U.S. dollars of \$21.6 million and \$45.4 million, respectively, all having maturities of seven months or less. The option contracts, which have only nominal intrinsic value at the time of purchase, are designated as effective hedges of anticipated foreign currency transactions for financial reporting purposes and accordingly, the net gains on such contracts are deferred and recognized in the same period as the hedged transactions. The forward contracts do not qualify as hedges for financial reporting purposes and accordingly, are marked-to-market. Net gains on option contracts (including option contracts for hedged transactions whose occurrence are no longer probable) and changes in market values of forward contracts are reflected in "Interest and other income". The deferred premiums on option contracts and fair values of forward contracts are included in "Other current assets".

The Company has additional foreign currency forward contracts to hedge exposures to foreign currency fluctuations of certain assets and liabilities denominated in foreign currencies. At June 30, 2000, the Company had forward contracts to exchange foreign currencies for U.S. dollars of \$46.3 million, all having maturities of less than one month. These contracts are designated as effective hedges and accordingly, gains and losses on these forward contracts are recognized in the same period the offsetting gains and losses of hedged assets and liabilities are realized and recognized. The fair values of the forward contracts are included in the corresponding

captions of the hedged assets and liabilities. Gains and losses on forward contracts, to the extent they differ in amount from the hedged assets and liabilities, are included in "Interest and other income".

#### Employee stock option and stock purchase plans

The Company's employee stock option and stock purchase plans are accounted for under Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees".

#### Earnings per share

Basic earnings per share is based upon the weighted-average number of common shares outstanding. Diluted earnings per share is based upon the weighted-average number of common shares and dilutive potential common shares outstanding. Potential common shares are outstanding options under the Company's employee stock option plans and potential issuances of stock under the employee stock purchase plan which are included under the treasury stock method.

The following table sets forth the computation for basic and diluted earnings per share (in millions, except per share information):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2000	1999	2000	1999
Numerator for basic and diluted earnings per share - net income	\$302.6	\$267.6	\$568.8	\$514.8
Denominator:				
Denominator for basic earnings per share - weighted-average shares	1,027.5	1,021.1	1,025.4	1,022.3
Effect of dilutive securities - employee stock options and stock issuances under the employee stock purchase plan	55.8	52.7	59.2	55.1
Denominator for diluted earnings per share - adjusted weighted-average shares	1,083.3	1,073.8	1,084.6	1,077.4
Basic earnings per share	\$ 0.29	\$ 0.26	\$ 0.55	\$ 0.50
Diluted earnings per share	\$ 0.28	\$ 0.25	\$ 0.52	\$ 0.48

#### Recent accounting pronouncements

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133 ("SFAS 133"), "Accounting for Derivative Instruments and Hedging Activities". SFAS 133 establishes accounting and reporting standards requiring that all derivatives be recorded in the balance sheet as either an asset or liability measured at fair value and that changes in fair

value be recognized currently in earnings, unless specific hedge accounting criteria are met. The Company is required to adopt SFAS 133, as amended, in the first quarter of 2001 and is currently evaluating the effect that such adoption may have on its results of operations and financial position.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101 ("SAB 101"), "Revenue Recognition in Financial Statements". SAB 101 provides guidance on applying generally accepted accounting principles to revenue recognition issues in financial statements. The Company is required to adopt SAB 101 in the fourth quarter of 2000. Management does not expect the adoption of SAB 101 to have a material effect on the Company's results of operations or financial position.

#### Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

#### Basis of presentation

The financial information for the three and six months ended June 30, 2000 and 1999 is unaudited but includes all adjustments (consisting only of normal recurring accruals, unless otherwise indicated) which the Company considers necessary for a fair presentation of the results of operations for these periods. Interim results are not necessarily indicative of results for the full fiscal year.

#### Reclassification

Certain prior year amounts have been reclassified to conform to the current year presentation.

## 2. Debt

As of June 30, 2000, the Company had \$223 million of unsecured long-term debt securities outstanding. These unsecured long-term debt securities consisted of: 1) \$100 million of debt securities that bear interest at a fixed rate of 6.5% and mature in 2007 that were issued in December 1997 under a \$500 million debt shelf registration (the "Shelf"), 2) \$100 million of debt securities that bear interest at a fixed rate of 8.1% and mature in 2007 and 3) \$23 million of debt securities that bear interest at a fixed rate of 6.2% and mature in 2003. Under the Shelf, all of the remaining \$400 million of debt securities available for issuance may be offered under the Company's medium-term note program from time to time with terms to be determined by market conditions.

The Company has a commercial paper program which provides for unsecured short-term borrowings up to an aggregate of \$200 million.

As of June 30, 2000, commercial paper with a face amount of \$100 million was outstanding. These borrowings had maturities of less than one month and had effective interest rates averaging 6.0%.

The Company also has an unsecured \$150 million credit facility that expires on May 28, 2003. This credit facility supports the Company's commercial paper program. As of June 30, 2000, no amounts were outstanding under this line of credit.

### 3. Income taxes

The provision for income taxes consists of the following (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2000	1999	2000	1999
Federal (including U.S. possessions)	\$126.1	\$105.9	\$235.0	\$196.6
State	11.0	8.9	20.6	16.7
	-----	-----	-----	-----
	\$137.1	\$114.8	\$255.6	\$213.3
	=====	=====	=====	=====

The Company's effective tax rate for the three and six months ended June 30, 2000 was 31.2% and 31.0%, respectively, compared with 30.0% and 29.3% for the same periods last year. The higher effective tax rates in the current year are primarily due to an increase in the current year's expected pretax income without corresponding increases in the tax benefits associated with the Company's Puerto Rico operations and research and experimentation credits.

### 4. Stockholders' equity

During the six months ended June 30, 2000, the Company repurchased 7.6 million shares of its common stock at a total cost of \$485.1 million under its common stock repurchase program. In October 1999, the Board of Directors authorized the Company to repurchase up to \$2 billion of common stock through December 31, 2000, replacing the remaining amount authorized in October 1998. The amount the Company spends on and the number of shares repurchased each quarter varies based on a variety of factors, including the stock price and blackout periods in which the Company is restricted from repurchasing shares. At June 30, 2000, \$1,163.1 million of this authorization remained. Stock repurchased under the program is retired.

On May 11, 2000, the Company's stockholders approved an increase in the number of authorized shares of common stock from 1,500,000,000 to 2,750,000,000.

## 5. Comprehensive income

During the three and six months ended June 30, 2000, total comprehensive income was \$291.0 million and \$609.2 million, respectively. During the three and six months ended June 30, 1999, total comprehensive income was \$260.7 million and \$495.4 million, respectively. The Company's other comprehensive income/loss is comprised of unrealized gains and losses on the Company's available-for-sale securities and foreign currency translation adjustments.

## 6. Contingencies

### Johnson & Johnson arbitrations

In September 1985, the Company granted Johnson & Johnson's affiliate, Ortho Pharmaceutical Corporation, a license relating to certain patented technology and know-how of the Company to sell a genetically engineered form of recombinant human erythropoietin, called Epoetin alfa, throughout the United States for all human uses except dialysis and diagnostics. A number of disputes have arisen between Amgen and Johnson & Johnson as to their respective rights and obligations under the various agreements between them, including the agreement granting the license (the "License Agreement").

A dispute between Amgen and Johnson & Johnson that has been the subject of an arbitration proceeding relates to the audit methodology currently employed by the Company to account for Epoetin alfa sales. The Company and Johnson & Johnson are required to compensate each other for Epoetin alfa sales that either party makes into the other party's exclusive market, sometimes described as "spillover" sales. The Company has established and is employing an audit methodology to measure each party's spillover sales and to allocate the net profits from those sales to the appropriate party. The arbitrator in this matter (the "Arbitrator") issued an opinion adopting the Company's audit methodology with certain adjustments and, subsequently, issued his final order confirming that the Company was the successful party in the arbitration. Pursuant to the final order in the arbitration, an independent panel was formed principally (i) to address ongoing challenges to the survey results for the years 1995 through 1999 and (ii) to refine the procedures for measuring the erythropoietin market as may be necessary. Johnson & Johnson has brought challenges under this procedure to certain survey results for certain periods. As a result of decisions made by this independent panel regarding certain of these challenges as well as other reduced uncertainties, the Company has reduced amounts previously provided for potential spillover liabilities by \$49 million in the third quarter of 1999 and \$23 million in the fourth quarter of 1998.

Because the Arbitrator ruled that the Company was the successful party in the arbitration, Johnson & Johnson was ordered to pay to the Company all costs and expenses, including reasonable attorneys' fees, that the Company incurred in the arbitration as well as one-half of the audit costs. The Company submitted a bill for such costs and expenses incurred over an eight-year period in

the amount of approximately \$110 million. Johnson & Johnson contested substantially all such costs and expenses. In addition, on October 26, 1998, Johnson & Johnson filed a petition in the Circuit Court of Cook County, Illinois (the "Illinois Lawsuit") seeking to vacate or modify the Arbitrator's award to the Company of all costs and expenses, including reasonable attorney's fees and costs, that the Company incurred in the arbitration. On January 26, 2000, the Arbitrator ruled that the Company is entitled to recover approximately \$78 million of its costs and expenses from Johnson & Johnson. On July 5, 2000, the Company and Johnson & Johnson entered into a Settlement Agreement and Mutual Release which provides that (i) the Company, as the successful party in the arbitration, will receive from Johnson & Johnson \$78 million for costs and expenses, including reasonable attorneys' fees that the Company incurred in the arbitration as well as one-half of the audit costs, (ii) the Company will pay to Johnson & Johnson \$10 million in full and final satisfaction of a dispute as to the remaining amount due to Johnson & Johnson for the 1991-1994 spillover award and (iii) Johnson & Johnson will voluntarily dismiss with prejudice the Illinois Lawsuit. On July 17, 2000, the Arbitrator issued a final order awarding the Company \$78 million in costs and expenses, including reasonable attorneys' fees that the Company incurred in the arbitration as well as one-half of the audit costs. The Company will recognize the \$78 million benefit of this award in the third quarter of 2000. On July 24, 2000, the Illinois Lawsuit was dismissed with prejudice.

The Company has filed a demand in the arbitration to terminate Johnson & Johnson's rights under the License Agreement and to recover damages for breach of the License Agreement based on the Company's claim that Johnson & Johnson has intentionally sold PROCRI(R) (the brand name under which Johnson & Johnson sells Epoetin alfa) into the Company's exclusive dialysis market. Pursuant to the Arbitrator's ruling, discovery has commenced. Both the Company and Johnson & Johnson filed motions for summary judgment which were argued in January 2000. On March 10, 2000, the Arbitrator denied both motions for summary judgment. A trial date has been set for February 2001. The Company is unable to predict at this time the outcome of its demand for termination of the License Agreement or when it will be resolved.

While it is not possible to predict accurately or determine the eventual outcome of the above described legal matters or various other legal proceedings (including patent disputes) involving Amgen, the Company believes that the outcome of these proceedings will not have a material adverse effect on its annual financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources

The Company had cash, cash equivalents and marketable securities of \$1,621.1 million at June 30, 2000, compared with \$1,333.0 million at December 31, 1999. Cash provided by operating activities has been and is expected to continue to be the Company's primary source of funds. During the six months ended June 30, 2000, operations provided \$656.3 million of cash compared with \$565.1 million during the same period last year.

Capital expenditures totaled \$188.7 million for the six months ended June 30, 2000, compared with \$147.0 million for the same period a year ago. The Company anticipates spending approximately \$450 million to \$550 million in 2000 on capital projects and equipment to expand the Company's global operations.

The Company receives cash from the exercise of employee stock options and proceeds from the sale of stock by Amgen pursuant to the employee stock purchase plan. During the six months ended June 30, 2000, employee stock option exercises, their related tax benefits and proceeds from the sale of stock by Amgen pursuant to the employee stock purchase plan provided \$336.7 million of cash compared with \$198.5 million for the same period last year. Proceeds from the exercise of employee stock options and their related tax benefits will vary from period to period based upon, among other factors, fluctuations in the market value of the Company's stock relative to the exercise price of such options.

The Company has a stock repurchase program primarily to reduce the dilutive effect of its employee stock option and stock purchase plans. During the six months ended June 30, 2000, the Company purchased 7.6 million shares of its common stock at a cost of \$485.1 million compared with 13.9 million shares purchased at a cost of \$470.7 million during the same period last year. In October 1999, the Board of Directors authorized the Company to repurchase up to \$2 billion of common stock through December 31, 2000, replacing the remaining amount authorized in October 1998. The amount the Company spends on and the number of shares repurchased each quarter varies based on a variety of factors, including the stock price and blackout periods in which the Company is restricted from repurchasing shares. As of June 30, 2000, \$1,163.1 million was available for stock repurchases.

To provide for financial flexibility and increased liquidity, the Company has established several sources of debt financing. As of June 30, 2000, the Company had \$223 million of unsecured long-term debt securities outstanding. These unsecured long-term debt securities consisted of: 1) \$100 million of debt securities that bear interest at a fixed rate of 6.5% and mature in 2007 that were issued in December 1997 under a \$500 million debt shelf registration (the "Shelf"), 2) \$100 million of debt securities that bear interest at a fixed rate of 8.1% and mature in 2097 and 3) \$23 million of debt securities that bear interest at a fixed rate of 6.2% and mature in

2003. Under the Shelf, all of the remaining \$400 million of debt securities available for issuance may be offered under the Company's medium-term note program from time to time with terms to be determined by market conditions.

The Company's sources of debt financing also include a commercial paper program which provides for unsecured short-term borrowings up to an aggregate face amount of \$200 million. As of June 30, 2000, commercial paper with a face amount of \$100 million was outstanding. These borrowings had maturities of less than one month and had effective interest rates averaging 6.0%. In addition, the Company has an unsecured \$150 million credit facility that expires on May 28, 2003. This credit facility supports the Company's commercial paper program. As of June 30, 2000, no amounts were outstanding under this line of credit.

The primary objectives for the Company's investment portfolio are liquidity and safety of principal. Investments are made to achieve the highest rate of return to the Company, consistent with these two objectives. The Company's investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities and concentration by type and issuer. The Company invests its excess cash in securities with varying maturities to meet projected cash needs.

The Company believes that existing funds, cash generated from operations and existing sources of debt financing are adequate to satisfy its working capital and capital expenditure requirements for the foreseeable future, as well as to support its stock repurchase program. However, the Company may raise additional capital from time to time.

## Results of Operations

### Product sales

Product sales were \$806.8 million and \$1,504.4 million during the three and six months ended June 30, 2000, respectively. These amounts represent increases of \$68.9 million and \$78.2 million or 9% and 5%, respectively, over the same periods last year. Quarterly product sales are influenced by a number of factors, including underlying demand, wholesaler inventory management practices and foreign exchange effects.

### EPOGEN(R) (Epoetin alfa)

EPOGEN(R) sales were \$493.0 million and \$933.4 million for the three and six months ended June 30, 2000, respectively. These amounts represent increases of \$65.0 million and \$110.5 million or 15% and 13%, respectively, over the same periods last year. These increases were primarily due to higher demand. Sales in the first six months of 2000 were adversely impacted by year 2000-related sales to wholesalers in the fourth quarter of 1999 for which the Company provided extended payment terms and, the Company believes,

by dialysis provider inventory drawdowns in 2000 of additional 1999 year-end stockpiling. The Company also believes that some of this dialysis provider stockpiling may have been due to year 2000 concerns and year-end contract expirations.

#### NEUPOGEN(R) (Filgrastim)

Worldwide NEUPOGEN(R) sales for the three months ended June 30, 2000 were \$309.7 million, an increase of \$6.2 million or 2% over the same period last year. For the six months ended June 30, 2000, worldwide NEUPOGEN(R) sales were \$559.7 million, a decrease of \$30.8 million or 5% from the same period last year.

During the second quarter of 2000, NEUPOGEN(R) sales were adversely impacted by several factors, including foreign exchange effects and continued low inventory levels at major wholesalers. The Company believes that NEUPOGEN(R) demand also softened in the second quarter of 2000 and grew at a mid-single digit rate, which includes the effect of higher prices in the U.S. The Company believes this softness in demand was due in part to the realignment of the oncology sales force.

NEUPOGEN(R) sales in the first six months of 2000 were adversely impacted primarily by year 2000-related sales to wholesalers in the fourth quarter of 1999 for which the Company provided extended payment terms and, the Company believes, by additional wholesaler inventory drawdowns in 2000. In addition, NEUPOGEN(R) sales in the first six months of 2000 were also adversely impacted by the stronger U.S. dollar. These decreases were partially offset by higher demand, which includes the effect of higher prices in the U.S.

#### Other product sales

Other product sales primarily consist of INFERGEN(R) (Interferon alfacon-1). INFERGEN(R) sales were \$3.8 million and \$10.7 million for the three and six months ended June 30, 2000, respectively. These amounts represent decreases of \$2.5 million and \$1.9 million or 40% and 15%, respectively, from the same periods last year. INFERGEN(R) was launched in October 1997 for the treatment of chronic hepatitis C virus infection. There are existing treatments, including combination therapy, for this infection against which INFERGEN(R) competes. The Company cannot predict the extent to which it will maintain its share or further penetrate this market.

#### Corporate partner revenues

During the three and six months ended June 30, 2000, corporate partner revenues increased \$12.1 million and \$59.3 million, or 25% and 78%, respectively, compared with the same periods last year. These increases were primarily due to amounts earned from Kirin-Amgen, Inc. related to the NESP development program.

#### Cost of sales

Cost of sales as a percentage of product sales was 12.6% and 12.5% for the three and six months ended June 30, 2000, respectively, compared with 13.4% for both of the same periods last year. These decreases as a percentage of product sales were due in part to increased manufacturing efficiencies.

#### Research and development

During the three and six months ended June 30, 2000, research and development expenses increased \$8.7 million and \$10.5 million, or 4% and 3%, respectively, compared with the same periods last year. Research and development expenses increased primarily due to higher staff-related costs necessary to support ongoing product development activities and higher clinical trial costs. These increases were substantially offset by a reduction in clinical manufacturing and product licensing costs.

#### Selling, general and administrative

During the three and six months ended June 30, 2000, selling, general and administrative ("SG&A") expenses increased \$47.9 million and \$84.7 million, or 30% and 29%, respectively, compared with the same periods last year. SG&A expenses increased primarily due to higher staff-related costs and outside marketing expenses as the Company continues to support its existing products and prepares for anticipated new product launches.

#### Interest and other income

During the three and six months ended June 30, 2000, interest and other income increased \$18.7 million and \$36.6 million, or 76% and 85%, respectively, compared with the same periods last year. These increases were primarily due to gains realized on the sale of certain equity securities in the Company's portfolio.

#### Income taxes

The Company's effective tax rate for the three and six months ended June 30, 2000 was 31.2% and 31.0%, respectively, compared with 30.0% and 29.3% for the same periods last year. The higher effective tax rates in the current year are primarily due to an increase in the current year's expected pretax income without corresponding increases in the tax benefits associated with the Company's Puerto Rico operations and research and experimentation credits.

#### Foreign currency transactions

The Company has a program to manage certain portions of its exposure to fluctuations in foreign currency exchange rates arising from international operations. The Company generally hedges the receivables and payables with foreign currency forward contracts, which typically mature within one to three months. The Company uses foreign currency option and forward contracts which generally expire within 12 months to hedge certain anticipated future sales and

expenses. At June 30, 2000, outstanding foreign currency option and forward contracts totaled \$21.6 million and \$91.7 million, respectively.

#### Financial Outlook

The Company expects the EPOGEN(R) sales growth rate in 2000 to be in the low teens. As average hematocrits have risen, the rate of demand growth has slowed and the Company expects this trend to continue in the future. Patients receiving treatment for end stage renal disease are covered primarily under medical programs provided by the federal government. Therefore, EPOGEN(R) sales may also be affected by future changes in reimbursement rates or a change in the basis for reimbursement by the federal government.

In their fiscal year 2001 budget, the Clinton administration has proposed a Medicare cost savings plan which includes a provision for cutting Medicare reimbursement of EPOGEN(R) by 10%. This proposal will be addressed during the federal government's fiscal year 2001 budget process. The Company believes the proposal, if enacted, would primarily affect dialysis providers that use EPOGEN(R) and it is difficult to predict its impact on Amgen.

Assuming that foreign exchange rates for the U.S. dollar remain at levels existing at June 30, 2000, the Company expects NEUPOGEN(R) sales in 2000 to be approximately the same as in 1999. The Company believes that there may be a trend in some cancer settings towards the use of chemotherapy treatments that are less myelosuppressive. Chemotherapy treatments that are less myelosuppressive may require less NEUPOGEN(R). Future NEUPOGEN(R) sales growth is dependent primarily upon further penetration of existing markets and the effects of competitive products. NEUPOGEN(R) usage is expected to continue to be affected by cost containment pressures from governments and private insurers on health care providers worldwide. In addition, reported NEUPOGEN(R) sales will continue to be affected by changes in foreign currency exchange rates. In both domestic and foreign markets, sales of NEUPOGEN(R) are dependent, in part, on the availability of reimbursement from third party payors such as governments (for example, Medicare and Medicaid programs in the U.S.) and private insurance plans. Therefore, NEUPOGEN(R) sales may also be affected by future changes in reimbursement rates or changes in the bases for reimbursement.

In their fiscal year 2001 budget, the Clinton administration has proposed a reduction in the basis upon which Medicare reimburses for outpatient prescription drugs from the current 95% of average wholesale price ("AWP") to 83% of AWP. This proposal would impact reimbursement of NEUPOGEN(R). The Company believes the proposal, if enacted, would primarily affect customers that use NEUPOGEN(R) and it is difficult to predict its impact on Amgen.

INFERGEN(R) (Interferon alfacon-1) was launched in October 1997 for the treatment of chronic hepatitis C virus infection. There are existing treatments, including combination therapy, for this infection against which INFERGEN(R) competes. The Company cannot

predict the extent to which it will maintain its share or further penetrate this market.

In 2000, SG&A expenses are expected to significantly increase as the Company continues to support its existing products and prepares for anticipated new product launches.

Excluding a legal award benefit of \$78 million to be recorded in the third quarter of 2000 (see Note 6 to the Condensed Consolidated Financial Statements), Amgen expects earnings per share for 2000 to be in the range of \$1.06 to \$1.08. Estimates of future product sales, operating expenses and earnings per share are necessarily speculative in nature and are difficult to predict with accuracy.

Except for the historical information contained herein, the matters discussed herein are by their nature forward-looking. Investors are cautioned that forward-looking statements or projections made by the Company, including those made in this document, are subject to risks and uncertainties that may cause actual results to differ materially from those projected. Reference is made in particular to forward-looking statements regarding product sales, earnings per share and expenses. Amgen operates in a rapidly changing environment that involves a number of risks, some of which are beyond the Company's control. Future operating results and the Company's stock price may be affected by a number of factors, including, without limitation: (i) the results of preclinical and clinical trials; (ii) regulatory approvals of product candidates, new indications and manufacturing facilities; (iii) reimbursement for Amgen's products by governments and private payors; (iv) health care guidelines and policies relating to Amgen's products; (v) intellectual property matters (patents) and the results of litigation; (vi) competition; (vii) fluctuations in operating results and (viii) rapid growth of the Company. These factors and others are discussed herein and in the sections appearing in "Item 1. Business - Factors That May Affect Amgen" in the Company's Annual Report on Form 10-K for the year ended December 31, 1999 which sections are incorporated herein by reference and filed as an exhibit hereto.

#### Legal Matters

The Company is engaged in arbitration proceedings with one of its licensees. For a discussion of these matters, see Note 6 to the Condensed Consolidated Financial Statements.

PART II - OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

Legal proceedings are reported in the Company's Annual Report on Form 10-K for the year ended December 31, 1999, with material developments since that report described in the Company's Form 10-Q for the quarter ended March 31, 2000, and below. While it is not possible to predict accurately or to determine the eventual outcome of these matters, the Company believes that the outcome of these proceedings will not have a material adverse effect on the annual financial statements of the Company.

Transkaryotic Therapies and Aventis S.A. litigation

On May 15, 2000, trial began in the United States District Court in Boston, Massachusetts (the "Court") and is ongoing. On June 9, 2000, the Court granted Transkaryotic Therapies, Inc.'s ("TKT") and Hoechst Marion Roussel, Inc.'s ("HMR" - now Aventis S.A., together with TKT, the "Defendants") motion for non-infringement of U.S. Patent No. 5,618,698 (the "'698 Patent"), removing the '698 Patent from this action. The Court also held that, although the Defendants' erythropoietin product does not literally fall within the scope of U.S. Patent No. 5,621,080 (the "'080 Patent"), such product may infringe if it is found to be equivalent to the product claimed by the '080 Patent. Additionally, the Court denied the Defendants' motion for non-infringement of U.S. Patent No. 5,547,933 (the "'933 Patent"). On July 21, 2000, the Court granted Amgen's motion for judgment on the Defendants' defenses of invalidity based upon anticipation and obviousness. The issues of infringement of the '933 Patent, the '080 Patent and U.S. Patent No. 5,756,349 remain to be decided by the Court as well as the other validity and inequitable conduct defenses raised by the Defendants.

Securities litigation

The class action complaint filed against the Company and certain of its current and former officers in the California Superior Court for the County of Ventura was dismissed with prejudice on May 31, 2000.

Johnson & Johnson arbitrations

The Company is engaged in arbitration proceedings with one of its licensees. See Note 6 to the Condensed Consolidated Financial Statements, "Contingencies-Johnson & Johnson arbitrations".

Item 4. Submission of Matters to a Vote of Security Holders

- (a) The Company held its Annual Meeting of Stockholders on May 11, 2000.
- (b) Omitted pursuant to Instruction 3 to Item 4 of Form 10-Q.
- (c) The four matters voted upon at the meeting were: (i) to elect three directors to a three year term of office expiring at the Annual Meeting of Stockholders in the year 2003; (ii) to approve an amendment to the Company's Restated Certificate of Incorporation, as amended, to increase the authorized number of shares of Common Stock from 1,500,000,000 shares to 2,750,000,000 shares ("Proposal Two"); (iii) to approve an amendment to the Company's Amended and Restated Employee Stock Purchase Plan to extend the term of such plan indefinitely ("Proposal Three"); and (iv) to ratify the selection of Ernst & Young LLP as independent auditors of the Company for the year ending December 31, 2000 ("Proposal Four").
  - (i) With respect to each of the nominees for director, Gordon M. Binder, received 902,615,275 shares in favor and 5,938,887 shares were withheld, Fredrick W. Gluck received 847,729,463 shares in favor and 60,824,699 shares were withheld and Franklin P. Johnson, Jr. received 902,666,186 shares in favor and 5,887,976 shares were withheld, and there were no abstentions or broker non-votes. All nominees were declared to have been elected as directors to hold office until the Annual Meeting of Stockholders in the year 2003.
  - (ii) With respect to Proposal Two, 840,847,018 shares were in favor, 63,282,003 shares were against, 4,424,308 shares abstained and there were 833 broker non-votes. Proposal Two was declared to have been approved.
  - (iii) With respect to Proposal Three, 878,301,243 shares were in favor, 24,001,076 shares were against, 6,209,340 shares abstained and there were 42,503 broker non-votes. Proposal Three was declared to have been approved.
  - (iv) With respect to Proposal Four, 903,214,912 shares were in favor, 1,694,599 shares were against, 3,644,649 shares abstained and there were 2 broker non-votes. Proposal Four was declared to have been approved.
- (d) Not applicable.

Item 5. Other Information

The Company's 2001 Annual Meeting of Stockholders will be held on May 17, 2001.

Item 6. Exhibits and Reports on Form 8-K

(a) Reference is made to the Index to Exhibits included herein.

(b) Reports on Form 8-K - none

SIGNATURES

Pursuant to the requirements 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.

Amgen Inc.  
(Registrant)

Date: 8/1/00  
-----

By: /s/ Kathryn E. Falberg  
-----  
Kathryn E. Falberg  
Senior Vice President, Finance  
and Chief Financial Officer

Date: 8/1/00  
-----

By: /s/ Barry D. Schehr  
-----  
Barry D. Schehr  
Vice President, Financial  
Operations, and  
Chief Accounting Officer

AMGEN INC.

INDEX TO EXHIBITS

Exhibit No.	Description
3.1	Restated Certificate of Incorporation as amended. (14)
3.2	Amended and Restated Bylaws. (22)
3.3*	Certificate of Amendment of Restated Certificate of Incorporation.
3.4*	Certificate of Amendment of Certificate of Designations of Series A Junior Participating Preferred Stock.
4.1	Indenture dated January 1, 1992 between the Company and Citibank N.A., as trustee. (6)
4.2	First Supplement to Indenture, dated February 26, 1997 between the Company and Citibank N.A., as trustee. (11)
4.3	Officer's Certificate pursuant to Sections 2.1 and 2.3 of the Indenture, as supplemented, establishing a series of securities "8-1/8% Debentures due April 1, 2097." (13)
4.4	8-1/8% Debentures due April 1, 2097. (13)
4.5	Form of stock certificate for the common stock, par value \$.0001 of the Company. (14)
4.6	Officer's Certificate pursuant to Sections 2.1 and 2.3 of the Indenture, dated as of January 1, 1992, as supplemented by the First supplemental Indenture, dated as of February 26, 1997, each between the Company and Citibank, N.A., as Trustee, establishing a series of securities entitled "6.50% Notes Due December 1, 2007". (16)
4.7	6.50% Notes Due December 1, 2007 described in Exhibit 4.6. (16)
4.8	Corporate Commercial Paper - Master Note between and among Amgen Inc., as Issuer, Cede & Co., as nominee of The Depository Trust Company and Citibank, N.A. as Paying Agent. (19)
10.1	Company's Amended and Restated 1991 Equity Incentive Plan. (22)
10.2	Sixth Amendment to the Company's Amended and Restated Retirement and Savings Plan as amended and restated April 1, 1996. (21)
10.3	Shareholder's Agreement of Kirin-Amgen, Inc., dated May 11, 1984, between the Company and Kirin Brewery Company, Limited (with certain confidential information deleted therefrom). (1)
10.4*	Amendment Nos. 1, 2, and 3, dated March 19, 1985, July 29, 1985 and December 19, 1985, respectively, to the Shareholder's Agreement of Kirin-Amgen, Inc., dated May 11, 1984.
10.5*	Product License Agreement, dated September 30, 1985, and Technology License Agreement, dated, September 30, 1985 between the Company and Ortho Pharmaceutical Corporation.

- 10.6\* Product License Agreement, dated September 30, 1985, and Technology License Agreement, dated September 30, 1985 between Kirin-Amgen, Inc. and Ortho Pharmaceutical Corporation.
- 10.7\* Company's Amended and Restated Employee Stock Purchase Plan.
- 10.8 Research, Development Technology Disclosure and License Agreement PPO, dated January 20, 1986, by and between the Company and Kirin Brewery Co., Ltd. (2)
- 10.9 Amendment Nos. 4 and 5, dated October 16, 1986 (effective July 1, 1986) and December 6, 1986 (effective July 1, 1986), respectively, to the Shareholders Agreement of Kirin-Amgen, Inc. dated May 11, 1984 (with certain confidential information deleted therefrom). (3)
- 10.10 Assignment and License Agreement, dated October 16, 1986, between the Company and Kirin-Amgen, Inc. (with certain confidential information deleted therefrom). (3)
- 10.11 G-CSF European License Agreement, dated December 30, 1986, between Kirin-Amgen, Inc. and the Company (with certain confidential information deleted therefrom). (3)
- 10.12 Research and Development Technology Disclosure and License Agreement: GM-CSF, dated March 31, 1987, between Kirin Brewery Company, Limited and the Company (with certain confidential information deleted therefrom). (3)
- 10.13 Company's Amended and Restated 1988 Stock Option Plan. (9)
- 10.14 Company's Amended and Restated Retirement and Savings Plan. (9)
- 10.15 Amendment, dated June 30, 1988, to Research, Development, Technology Disclosure and License Agreement: GM-CSF dated March 31, 1987, between Kirin Brewery Company, Limited and the Company. (4)
- 10.16 Agreement on G-CSF in Certain European Countries, dated January 1, 1989, between Amgen Inc. and F. Hoffmann-La Roche & Co. Limited Company (with certain confidential information deleted therefrom). (5)
- 10.17 Partnership Purchase Agreement, dated March 12, 1993, between the Company, Amgen Clinical Partners, L.P., Amgen Development Corporation, the Class A limited partners and the Class B limited partner. (7)
- 10.18 Amgen Inc. Supplemental Retirement Plan (As Amended and Restated Effective November 1, 1999). (23)
- 10.19\* First Amendment to Amgen Inc. Change of Control Severance Plan.
- 10.20 Amended and Restated Amgen Performance Based Management Incentive Plan. (22)
- 10.21 Credit Agreement, dated as of May 28, 1998, among Amgen Inc., the Borrowing Subsidiaries named therein, the Banks named therein, Citibank, N.A., as Issuing Bank, and Citicorp USA, Inc., as Administrative Agent. (20)
- 10.22 Promissory Note of Mr. George A. Vandeman, dated December 15, 1995. (8)
- 10.23 Promissory Note of Mr. George A. Vandeman, dated December 15, 1995. (8)
- 10.24 Agreement between Amgen Inc. and Dr. N. Kirby Alton, dated October 11, 1999. (23)

- 10.25 Amendment No. 1 to the Company's Amended and Restated Retirement and Savings Plan. (9)
- 10.26 Seventh Amendment to the Amgen Retirement and Savings Plan as Amended and Restated effective April 1, 1996. (22)
- 10.27 Amendment Number 2 to the Company's Amended and Restated Retirement and Savings Plan dated April 1, 1996. (12)
- 10.28 Amgen Inc. Change of Control Severance Plan effective as of October 20, 1998. (21)
- 10.29 Preferred Share Rights Agreement, dated February 18, 1997, between Amgen Inc. and American Stock Transfer and Trust Company, Rights Agent. (10)
- 10.30 First Amendment, effective January 1, 1998, to the Company's Amended and Restated Employee Stock Purchase Plan. (15)
- 10.31 Third Amendment, effective January 1, 1997, to the Company's Amended and Restated Retirement and Savings Plan dated April 1, 1996. (15)
- 10.32 Agreement between Amgen Inc. and Dr. Fabrizio Bonanni, dated March 3, 1999. (23)
- 10.33 Promissory Note of Ms. Kathryn E. Falberg, dated April 7, 1995. (17)
- 10.34 Promissory Note of Mr. Edward F. Garnett, dated July 18, 1997. (17)
- 10.35 Fourth Amendment to the Company's Amended and Restated Retirement and Savings Plan as amended and restated effective April 1, 1996. (17)
- 10.36 Fifth Amendment to the Company's Amended and Restated Retirement and Savings Plan as amended and restated effective April 1, 1996. (17)
- 10.37 Company's Amended and Restated 1987 Directors' Stock Option Plan. (12)
- 10.38 Amended and Restated Agreement on G-CSF in the EU between Amgen Inc. and F. Hoffmann-La Roche Ltd (with certain confidential information deleted therefrom). (19)
- 10.39 Collaboration and License Agreement, dated December 15, 1997, between the Company, GPI NIL Holdings, Inc. and Guilford Pharmaceuticals Inc. (with certain confidential information deleted therefrom). (18)
- 10.40 Promissory Note of Dr. Fabrizio Bonanni, dated August 7, 1999. (23)
- 10.41 Promissory Note of Dr. Fabrizio Bonanni, dated October 29, 1999. (23)
- 10.42 Agreement between Amgen Inc. and Dr. Lawrence M. Souza, Ph.D., dated March 6, 2000. (24)
- 10.43\* Agreement between Amgen Inc. and Mr. Gordon M. Binder, dated May 10, 2000.
- 27\* Financial Data Schedule.
- 99\* Sections appearing under the heading "Item 1. Business - Factors That May Affect Amgen" in the Company's Annual Report on Form 10-K for the year ended December 31, 1999.

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\* Filed herewith.

- (1) Filed as an exhibit to the Annual Report on Form 10-K for the year ended March 31, 1984 on June 26, 1984 and incorporated herein by reference.
- (2) Filed as an exhibit to Amendment No. 1 to Form S-1 Registration Statement (Registration No. 33-3069) on March 11, 1986 and incorporated herein by reference.
- (3) Filed as an exhibit to the Form 10-K Annual Report for the year ended March 31, 1987 on May 18, 1987 and incorporated herein by reference.
- (4) Filed as an exhibit to Form 8 amending the Quarterly Report on Form 10-Q for the quarter ended June 30, 1988 on August 25, 1988 and incorporated herein by reference.
- (5) Filed as an exhibit to the Form 8 dated November 8, 1989, amending the Annual Report on Form 10-K for the year ended March 31, 1989 on June 28, 1989 and incorporated herein by reference.
- (6) Filed as an exhibit to Form S-3 Registration Statement dated December 19, 1991 and incorporated herein by reference.
- (7) Filed as an exhibit to the Form 8-A dated March 31, 1993 and incorporated herein by reference.
- (8) Filed as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 1995 on March 29, 1996 and incorporated herein by reference.
- (9) Filed as an exhibit to the Form 10-Q for the quarter ended September 30, 1996 on November 5, 1996 and incorporated herein by reference.
- (10) Filed as an exhibit to the Form 8-K Current Report dated February 18, 1997 on February 28, 1997 and incorporated herein by reference.
- (11) Filed as an exhibit to the Form 8-K Current Report dated March 14, 1997 on March 14, 1997 and incorporated herein by reference.
- (12) Filed as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 1996 on March 24, 1997 and incorporated herein by reference.
- (13) Filed as an exhibit to the Form 8-K Current Report dated April 8, 1997 on April 8, 1997 and incorporated herein by reference.
- (14) Filed as an exhibit to the Form 10-Q for the quarter ended March 31, 1997 on May 13, 1997 and incorporated herein by reference.
- (15) Filed as an exhibit to the Form 10-Q for the quarter ended June 30, 1997 on August 12, 1997 and incorporated herein by reference.
- (16) Filed as an exhibit to the Form 8-K Current Report dated and filed on December 5, 1997 and incorporated herein by reference.
- (17) Filed as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 1997 on March 24, 1998 and incorporated herein by reference.
- (18) Filed as Exhibit 10.40 to the Guilford Pharmaceuticals Inc. Form 10-K for the year ended December 31, 1997 on March 27, 1998 and incorporated herein by reference.
- (19) Filed as an exhibit to the Form 10-Q for the quarter ended March 31, 1998 on May 13, 1998 and incorporated herein by reference.

- (20) Filed as an exhibit to the Form 10-Q for the quarter ended June 30, 1998 on August 14, 1998 and incorporated herein by reference.
- (21) Filed as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 1998 on March 16, 1999 and incorporated herein by reference.
- (22) Filed as an exhibit to the Form 10-Q for the quarter ended June 30, 1999 on August 3, 1999 and incorporated herein by reference.
- (23) Filed as an exhibit to the Annual Report on Form 10-K for the year ended December 31, 1999 on March 7, 2000 and incorporated herein by reference.
- (24) Filed as an exhibit to the Form 10-Q for the quarter ended March 31, 2000 on April 27, 2000 and incorporated herein by reference.

CERTIFICATE OF AMENDMENT  
OF  
RESTATED CERTIFICATE OF INCORPORATION  
OF  
AMGEN INC.

Amgen Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), DOES HEREBY CERTIFY:

FIRST: That a resolution was duly adopted by the Board of Directors of the Corporation setting forth a proposed amendment to the Restated Certificate of Incorporation of the Corporation, as amended, and declaring said amendment to be advisable and recommended for approval by the stockholders of the Corporation. The resolution setting forth the proposed amendment states that the first paragraph of the Fourth Article of the Restated Certificate of Incorporation of the Corporation, as amended, be, and it hereby is, amended to read in full as follows:

"FOURTH: This corporation is authorized to issue two (2) classes of stock to be designated, respectively, "Preferred Stock" and "Common Stock." The total number of shares which this corporation is authorized to issue is Two Billion Seven Hundred and Fifty-Five Million (2,755,000,000) shares, of which Five Million (5,000,000) shares shall be Preferred Stock and Two Billion Seven Hundred and Fifty Million (2,750,000,000) shares shall be Common Stock, all with a par value of \$.0001."

SECOND: That, thereafter, pursuant to a resolution of the Board of Directors, the officers of the Corporation solicited the vote of the stockholders thereof at the Annual

Meeting of Stockholders in favor of the amendment, and the stockholders of the Corporation approved the amendment by a majority of the outstanding stock entitled to vote thereon.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law.

FOURTH: That the capital of said corporation shall not be reduced under or by reason of said amendment.

IN WITNESS WHEREOF, said Corporation has caused this Certificate of Amendment to be signed by Steven M. Odre, its Senior Vice President, General Counsel and Secretary, this 11th day of May, 2000.

/s/ Steven M. Odre  
-----  
Steven M. Odre, Senior Vice President,  
General Counsel and Secretary

CERTIFICATE OF AMENDMENT  
OF  
CERTIFICATE OF DESIGNATIONS  
OF  
SERIES A JUNIOR PARTICIPATING PREFERRED STOCK  
OF  
AMGEN INC.

Amgen Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), DOES HEREBY CERTIFY:

FIRST: That, pursuant to the authority granted to and vested in the Board of Directors in accordance with the provisions of its Restated Certificate of Incorporation, as amended, and Section 1 of the Certificate of Designations of Series A Junior Participating Preferred Stock of the Corporation, as amended (the "Certificate of Designations"), resolutions were duly adopted by the Board of Directors of the Corporation approving an amendment to the Certificate of Designations increasing the number of shares designated as Series A Junior Participating Preferred Stock from 1,500,000 to 2,750,000 shares. Pursuant to those resolutions, the Certificate of Designations is hereby amended by striking the first sentence following "Section 1. Designation and Amount." and substituting in lieu thereof a new sentence as follows:

"Section 1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" (the "Series A Preferred Stock") and the number of shares constituting the Series A Preferred Stock shall be 2,750,000."

SECOND: That said amendment was duly adopted in accordance with the provisions of the Delaware General Corporation Law.

IN WITNESS WHEREOF, said Corporation has caused this Certificate of Designations to be signed by Steven M. Odre, its Senior Vice President, General Counsel and Secretary, this 11th day of May, 2000.

/s/ Steven M. Odre

-----  
Steven M. Odre, Senior Vice President,  
General Counsel and Secretary

AMENDMENT NO. 1  
-----  
TO  
--  
SHAREHOLDERS' AGREEMENT  
-----  
OF  
--  
KIRIN-AMGEN, INC.  
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THIS AMENDMENT NO. 1 TO THAT CERTAIN SHAREHOLDERS' AGREEMENT OF KIRIN-AMGEN, INC., DATED MAY 11, 1984 ("Amendment No. 1") is made and entered into this 19th day of March, 1985, by and among KIRIN BREWERY COMPANY, LTD., a Japanese corporation ("Kirin"), AMGEN, a California corporation ("Amgen"), and KIRIN-AMGEN, INC., a California corporation ("Corporation").

R E C I T A L  
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Pursuant to Paragraph 22.19 of the Shareholders' Agreement regarding expansion of the business of Corporation, the parties hereto desire Corporation to purchase from Amgen the worldwide rights to EPO Human Diagnostic and Reagent as an expansion of the Field of Activity as defined in the Shareholders' Agreement in accordance with the terms and conditions set forth below and to license the same to Kirin for the territory of Japan and to Amgen for the territory of the United States of America and its territories and possessions.

NOW, THEREFORE, it is agreed as follows:

1. EPO HUMAN DIAGNOSTIC AND REAGENT RIGHTS:EXPANSION OF FIELD: OF ACTIVITY AND  
-----  
BUSINESS OPPORTUNITIES  
-----

Corporation hereby agrees to purchase the worldwide rights to EPO Human Diagnostic and Reagents ("Diagnostic Rights") from Amgen for a price of (U.S.) \$1,000,000. This purchase shall constitute an expansion of the Field of Activity as defined in the Shareholder's Agreement, and in accordance with Paragraph 22.19 of the Shareholders' Agreement, shall also constitute the first additional opportunity for mutual development of other products and areas of interest by Kirin, Amgen and Corporation.

2. PURCHASE, PAYMENT OF PURCHASE PRICE AND TRANSFER OF DIAGNOSTI RIGHTS  
-----

Corporation shall promptly pay Amgen (U.S.) \$1,000,000 for the Diagnostic Rights concurrently with the delivery by Amgen to Corporation of the Assignment and License Agreement attached hereto as Exhibit "A" together with the physical transfer of assets comprising the Diagnostic Rights.

3. REPRESENTATIONS AND WARRANTIES OF AMGEN REGARDING DIAGNOSTIC

-----  
RIGHTS  
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As of March 19, 1985, Amgen has valid legal title to and will vest in Corporation valid legal title to all Diagnostic Rights free and clear of any and all liens, claims, security interests, encumbrances and restrictions.

4. CONSISTENCY WITH SHAREHOLDERS' AGREEMENT

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The rights and obligations of the parties in this Amendment No. 1 with respect to this expansion of business opportunity shall be consistent with the provisions of the Shareholders' Agreement.

5. KIRIN LICENSE

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Kirin shall pay Corporation (U.S.) \$200,000, which payment shall entitle Kirin to a fully-paid exclusive license in Kirin's territory of Japan with respect to the Diagnostic Rights in accordance with the License Agreement attached hereto as Exhibit "B."

6. AMGEN LICENSE

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Amgen shall pay Corporation (U.S.) \$200,000, which payment shall entitle Amgen to a fully-paid exclusive license in Amgen's territory of the United States and its territories and possessions with respect to the Diagnostic Rights in accordance with the License Agreement attached hereto as Exhibit "C."

7. FURTHER INSTRUMENTS

-----  
Each party hereto agrees to perform any and all further acts and execute and deliver any and all further documents and/or instruments which may be reasonable or necessary to carry out the provisions of this Amendment No. 1 to the Shareholders' Agreement and to carry out this further business purpose of Corporation.

IN WITNESS WHEREOF, the undersigned have caused this Amendment to be executed on March 19, 1985 by their duly authorized representatives in the manner legally binding upon them

KIRIN BREWERY COMPANY, LTD.,  
a Japanese corporation

By /s/ Shinkichi Kubo  
-----  
Shinkichi Kubo, Managing Director  
"Kirin"

AMGEN, a California corporation

By /s/ George B. Rathmann  
-----  
George B. Rathmann, President  
"Amgen"

KIRIN-AMGEN, INC., a California corporation

By /s/ Tatsuhiko Kaneko  
-----  
\_\_\_\_\_ Its \_\_\_\_\_  
"Corporation"

ASSIGNMENT AND LICENSE AGREEMENT

by and between

AMGEN,  
a California corporation,

and

KIRIN-AMGEN, INC.,  
a California corporation

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ASSIGNMENT AND LICENSE AGREEMENT

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THIS ASSIGNMENT AND LICENSE AGREEMENT ("Agreement") is made this 4th day of December, 1985, and is made effective as of the 27th day of June, 1985, by and between AMGEN, a California corporation ("Amgen"), in favor and for the benefit of and with KIRIN-AMGEN, INC., a California corporation ("Company"), pursuant to terms and conditions of that certain Shareholders' Agreement, dated May 11, 1984, as amended by Amendment No. 1, dated March 19, 1985 ("Shareholders' Agreement"), by and among Amgen, Company and Kirin Brewery Company, Ltd., a Japanese corporation ("Kirin").

R E C I T A L S

- - - - -

A. Pursuant to Paragraph 22.19 of the Shareholders' Agreement regarding expansion of the business of Corporation, the parties hereto desire Company to purchase from Amgen the worldwide rights to EPO Human Diagnostics and Reagents (not including non-human veterinary purposes) ("Diagnostic Rights Field of Activity and/or Diagnostic Rights) as an expansion of the Field of Activity as defined in the Shareholders' Agreement in accordance with the terms and conditions set forth below and to license the same to Kirin for the territory of Japan and to Amgen for the territory of the United States of America and its territories and possessions.

B. Company hereby agrees to purchase and license the worldwide Diagnostic Rights from Amgen for a price of One Million Dollars U.S. (\$1,000,000). This purchase shall constitute an expansion of the Field of Activity as defined in the Shareholder's Agreement, and in accordance with Paragraph 22.19 of the Shareholders' Agreement.

NOW, THEREFORE, it is agreed as follows:

ARTICLE I  
-----

TRANSFER AND LICENSE OF TECHNOLOGY  
-----

1.01 Assignment of Diagnostic Rights Transferred Technology. Amgen  
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hereby transfers and assigns to the Company, perpetually and irrevocably, all of its right, title and interest in and to the Diagnostic Rights Transferred Technology, as specifically set forth in Schedule "A" attached hereto, and agrees to execute all documents necessary to effectuate the legal transfer of legal title thereto and assignment to the Company, including but not limited to an assignment of the patents applications, and any inventions disclosed therein, and intangibles to be recorded with the United States Patent and Trademark Office.

1.02 License of Diagnostic Rights Core Technology. Amgen hereby  
-----

grants to the Company a royalty-free, perpetual and exclusive right and license throughout the world in and to all of

the Diagnostic Rights Core Technology solely with respect to its direct application to the Diagnostic Rights Field of Activity.

1.03 Right to Sublicense the Diagnostic Rights Core Technology.

-----  
Amgen also hereby grants to the Company royalty-free the right to grant sublicenses within and limited to the scope of the right and license granted to the Company in Section 1.02 only, (a) to Kirin under that certain License Agreement between the Company and Kirin, dated of even date herewith, (b) to any subsidiary of the Company, (c) to a single manufacturer in addition to Kirin and Amgen for the account of the Company outside of the Amgen Territory and Kirin Territory, and (d) to licensees of the Company under patents, know-how or materials owned by the Company to the extent such licensees require any such sublicense in order to practice the patents or know-how or to use the materials that are the subject of the license from the Company, provided, however, that no sublicense shall be granted under clause (d) hereof without the prior written consent (not to be unreasonably withheld) of Amgen. Any sublicensees of the Company shall undertake in writing to be bound by the provisions of Sections 3.01 and 3.02 hereof to the same extent the Company is bound. The Company shall notify Amgen of the identity of each sublicensee to whom a sublicense is granted and provide Amgen a true and correct copy of such sublicense. In the event that the license granted to the

Company is terminated at any time in accordance with Article VII, and Amgen shall not be in default under Section 7.02 hereof, Amgen shall have the option to terminate or to have the Company assign to Amgen, retroactive to the date of termination, any sublicenses granted hereunder by the Company to any subsidiary of the Company. The Company shall include in all its sublicenses granted hereunder to any subsidiary of the Company provisions for such termination and assignment.

1.04 Limitations. No right or license is granted to the Company  
-----  
hereunder except as expressly specified in Sections 1.01, 1.02 and 1.03 hereof.

ARTICLE II  
-----

DEFINITIONS  
-----

2.01 Incorporation by Reference. The definitions of terms contained  
-----  
in the Shareholders' Agreement are hereby incorporated by reference.

2.02 Diagnostic Rights Field of Activity/Diagnostic Rights  
-----  
Technology. Diagnostic Rights Field of Activity/Diagnostic Rights Technology  
-----  
shall mean the areas of development manufacture, production, use and worldwide commercial sale of EPO human diagnostic and/or reagent products and shall exclude non-human veterinary purposes.

ARTICLE III

-----

DISCLOSURE OF DIAGNOSTIC RIGHTS CORE TECHNOLOGY

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3.01 Limitation on Usage. Except as expressly authorized by this

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Agreement or by other written consent of Amgen, for the term of this Agreement and thereafter, the Company shall not deliver, transmit or provide to any person other than to a sublicensee under a license granted in accordance with Section 1.03, and shall not use, any of the Diagnostic Rights Core Technology owned by Amgen, or authorize, cause or aid anyone else to do so. Except as provided in Section 1.03 above, nothing in this Agreement shall be deemed to give the Company any right or license to use or to replicate or reproduce any of the Diagnostic Rights Core Technology owned by Amgen, or to authorize, aid, or cause others so to do.

3.02 Survival. The obligation of confidentiality imposed by the

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foregoing Section 3.01 shall survive termination of this Agreement for any reason whatsoever.

ARTICLE IV

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PATENT, COPYRIGHT AND TRADE SECRET ENFORCEMENT

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4.01 Enforcement. Amgen shall have the right to bring, defend and

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maintain, and the Company shall have the right, but not the obligation, to join in, any appropriate suit or action

involving infringement of any patents or copyrights, misappropriation of any trade secrets or interference with any Diagnostic Rights Core Technology licensed to the Company in the Diagnostic Rights Field of Activity pursuant to this Agreement. If Amgen declines to enforce any patent, trade secret or other right, then in such event, the Company and/or Kirin shall each have the right, but not the obligation to bring any such action. If the Company or Kirin finds it necessary to join Amgen in such suit or action, Amgen shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. The Company or Kirin, whichever brings the action, shall pay to Amgen its reasonable expenses (excluding its attorney's fees) in connection with any such suit or action. Should the Company or Kirin, whichever brings the action, lack standing to bring any such action then the Company or Kirin may cause Amgen to do so upon first undertaking to indemnify and hold Amgen harmless (to the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expenses (including attorney fees) stemming therefrom. Any amount recovered in any such action or suit, whether by judgment or settlement, shall be paid to or retained entirely by the Company or Kirin, whichever brought the action.

4.02 Notice of Infringements. Either party hereto shall provide the  
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other with reasonable notice of the evidence and

existence of third parties, who come to the attention of such party, who may be involved in activities which infringe or potentially infringe, misappropriate or potentially misappropriate or interfere with patents, copyrights, trade secrets concerning the Diagnostic Rights Core Technology licensed to the Company pursuant to this Agreement.

ARTICLE V

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PATENT APPLICATIONS AND COPYRIGHT REGISTRATIONS

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5.01 Applications. Amgen shall have the obligation of prosecuting and maintaining in force patent applications or patents and copyright registrations or copyrights, if any, of the Diagnostic Rights Core Technology, and any costs thereby incurred shall be borne by Amgen.

ARTICLE VI

-----

DISCLAIMER OF INDEMNIFICATION

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6.01 Disclaimer of Warranties. AMGEN EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE DIAGNOSTIC RIGHTS TRANSFERRED TECHNOLOGY AND LICENSED DIAGNOSTIC RIGHTS CORE TECHNOLOGY TO BE FURNISHED BY AMGEN TO THE COMPANY HEREUNDER.

ARTICLE VII

-----  
TERM AND TERMINATION  
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7.01 Term. This Agreement (including the license and rights granted  
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under Sections 1.02 and 1.03 hereof) shall come into effect as of June 27, 1985  
and shall remain in full force and effect until the earlier of (a) the  
liquidation or dissolution of the Company other than in connection with a  
continuation of the business of the Company in some other legal form, or (b)  
termination pursuant to Section 7.02.

7.02 Default. In the event that the Company or Amgen (the "Defaulting  
-----  
Party") shall (a) default in a material obligation hereunder and fail to remedy  
such default within sixty (60) days after such default shall have been called to  
its attention by a notice in writing from the non-breaching party, (b) become  
bankrupt or insolvent, or file a petition in bankruptcy or make a general  
assignment for the benefit of creditors or otherwise acknowledge insolvency, or  
be adjudged bankrupt, (c) go or be placed in a process of complete liquidation  
other than in connection with a continuation of the business of the Company in  
some other legal form, or (d) suffer the appointment of a receiver for any  
substantial portion of its business who shall not be discharged within sixty  
(60) days after his appointment, then, and in any such event, the non-breaching  
party, at its option, may terminate its

obligations to and the rights of the Defaulting Party under the license to the Diagnostic Rights Core Technology granted under this Agreement upon ten (10) days' written notice to the Defaulting Party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

7.03 Continuing Obligations. Notwithstanding the termination of a

-----  
party's obligations to or the rights of the Defaulting Party under this Agreement in accordance with the provisions of Section 7.01 or 7.02, the provisions of Sections 3.01 and 3.02, this Section 7.03 and Article VIII hereof shall survive such termination and continue in full force and effect for an indefinite term. Upon termination of this Agreement for any reason, and without limitation of other remedies, the Company shall immediately return to Amgen (to the extent such return is technically feasible) all materials relating to the Diagnostic Rights Core Technology in the possession of the Company or its subsidiaries, or of which the Company shall have the right to regain possession or, at the sole election of Amgen, shall destroy such material (to the extent technically feasible).

ARTICLE VIII

-----  
CONSISTENCY WITH SHAREHOLDERS' AGREEMENT  
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8.01 Shareholders' Agreement. This assignment of the Diagnostic

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Rights Transferred Technology and license of the

Diagnostic Rights Core Technology is granted pursuant to Amendment No. 1 of the Shareholders' Agreement and shall be governed by the provisions thereof to the extent applicable. To the extent that there may be conflicts or inconsistencies between the provisions of this Agreement and those contained in the Shareholders' Agreement and Amendment No. 1 thereto, the provisions of the Shareholders' Agreement and Amendment No. 1 thereto shall prevail and govern interpretation.

ARTICLE IX  
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CONSENTS AND APPROVALS  
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9.01 Best Efforts. The parties hereto shall use their best efforts to  
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obtain as soon as practicable any and all consents, approvals, orders or authorizations required to be obtained from any governmental authority with respect to the provisions hereof.

ARTICLE X  
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NOTICE  
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10.01 Notices. All notices, requests, demands and other communications  
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required or permitted to be given under this Agreement shall be in writing and shall be mailed to the Party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return

receipt requested, postage prepaid, and properly addressed as follows (in which case such notice shall be deemed to have been duly given on the third (3rd) day following the date of such sending):

"Amgen"                    Amgen  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

With a copy to:        Cooley, Godward, Castro,  
Huddleson & Tatum  
One Maritime Plaza, 20th Floor  
San Francisco, CA 94111  
U.S.A.  
Telex No. 910-372-7370 Cooley SFO  
Attn: Alan C. Mendelson, Esq.

"Company"                Kirin-Amgen, Inc.  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

With a copy to:        Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 2000  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701357 (MPG LAW UD)  
Attn: Joel S. Marcus, Esq.

Any Party by giving notice to the others in the manner provided above may change such Party's address for purposes of this Paragraph 10.01.

ARTICLE XI

MISCELLANEOUS

11.01 Entire Agreement. This Agreement, together with any other

written agreements between the parties hereto referred to in the Shareholders' Agreement and Amendment No. 1, set forth the entire agreement of the parties with respect to the subject matter hereof and may not be modified except by a writing signed by authorized representatives of the parties hereto.

11.02 Headings. Article and section headings in this Agreement are

included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose.

11.03 Execution in Counterparts. This Agreement may be executed in

any number of counterparts and by different parties hereto in separate counterparts each of which when so executed and delivered shall be deemed to be an original and all of which counterparts of this Agreement taken together shall constitute but one and the same instrument.

11.04 Force Majeure. It is agreed that each of the parties hereto is

excused from performing such acts as are required hereunder as may be prevented by or whose purpose is frustrated by Force Majeure. The party so affected shall give notice to the other party in writing promptly and thereupon shall

be excused from such of its obligations hereunder as it is unable to perform on account of the Force Majeure throughout the duration thereof plus a period of thirty (30) days.

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

11.06 Assignment on Written Consent. This Agreement may not be  
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assigned in whole or in part by Amgen or the Company, except with the prior written consent of the other party.

11.07 Severability. In the event any one or more of the provisions  
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contained in this Agreement shall be invalid, illegal or unenforceable in any respect, the validity, legality and/or enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. In such event, such invalid provision or provisions shall be validly reformed to as nearly approximate the intent of the parties as possible and if unreformable, shall be severed and deleted from this Agreement.

11.08 No Waiver. No failure or delay on the part of either party in  
-----  
exercising any right, power or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder or the remedies provided by law.

11.09 Trademarks and Tradenames. Amgen grants no rights to the

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Company in any trademarks or tradenames of Amgen or of any of its respective subsidiaries or affiliated companies.

11.10 Indemnity. The Company hereby (a) releases Amgen from any

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obligation to defend, indemnify or save the Company and its agents and employees harmless from and (b) agrees to defend, indemnify and save Amgen harmless from any and all costs, expenses (including attorneys' fees), liabilities, damages and claims for any injury or death to persons or damage to or destruction of property, or other loss, arising out of or in connection with any product made, used or sold by the Company or the use by the Company of any Transferred or Licensed Technology furnished pursuant to any provision hereunder.

11.11 Other Agreements. Any other provision of this Agreement

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notwithstanding, nothing in this Agreement shall obligate Amgen to disclose to the Company any information or to make available to the Company any materials in violation of an obligation of secrecy or a limitation of use imposed by a third party from whom such information or materials shall have been received.

11.12 Attorneys' Fees and Costs. In the event of any action at law or

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in equity between the Parties hereto to enforce any of the provisions hereof, the unsuccessful party or parties to such litigation shall pay to the successful party or parties

all costs and expenses, including actual attorneys' fees, incurred therein by such successful party or parties; and if such successful party or parties shall recover judgment in any such action or proceeding, such costs, expenses and attorneys' fees may be included in and as part of such judgment. The successful party shall be the party who is entitled to recover its costs of suit, whether or not the suit proceeds to final judgment. A party not entitled to recover its costs shall not recover attorneys' fees.

11.13 Remedies. No right, power or remedy herein conferred upon or

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reserved to any Party is intended to be exclusive of any other right, power or remedy or remedies, and each and every right, power and remedy of any Party pursuant to this Agreement or now or hereafter existing at law or in equity or by statute or otherwise shall to the extent permitted by law be cumulative and concurrent, and shall be in addition to every other right, power or remedy pursuant to this Agreement, or now or hereafter existing at law or in equity or by statute or otherwise and the exercise or beginning of the exercise by any Party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by any Party of any or all such other rights, powers or remedies.

11.14 Binding Effect. This Agreement shall be binding upon and inure  
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to the benefit of the Parties hereto, their successors and assigns.

11.15 Exhibits. The schedule attached hereto and referred to herein  
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is hereby incorporated herein as though fully set forth at length.

11.16 Number and Gender. Words in the singular shall include the  
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plural, and words in a particular gender shall include either or both additional  
genders, when the context in which such words are used indicates that such is  
the intent.

11.17 Representations. Each of the Parties hereto acknowledges and  
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agrees (i) that no representation or promise not expressly contained in this  
Agreement has been made by any other Party hereto or by any of its agents,  
employees, representatives or attorneys; (ii) that this Agreement is not being  
entered into on the basis of, or in reliance on, any promise or representation,  
expressed or implied, covering the subject matter hereof; other than those which  
are set forth expressly in this Agreement; and (iii) that each has had the  
opportunity to be represented by counsel of its own choice in this matter,  
including the negotiations which preceded the execution of this Agreement.

11.18 Agreement to Perform Necessary Acts. Each Party agrees to  
-----  
perform any further acts and execute and deliver any and all further documents  
and/or instruments which may be

reasonably necessary to carry out the provisions of this Agreement and to carry out the business purposes of Corporation.

IN WITNESS WHEREOF, Amgen and the Company have caused this Agreement to be executed by their duly authorized representatives in the manner legally binding on them as of the date first above written.

KIRIN-AMGEN, INC., a California corporation

By /s/ Shinkichi Kubo  
-----  
Shinkichi Kubo, Chairman  
"Company"

AMGEN, a California corporation

By /s/ George B. Rathmann  
-----  
George B. Rathmann, President  
"Amgen"

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LICENSE AGREEMENT

by and between

KIRIN-AMGEN, INC.,  
a California corporation

and

KIRIN BREWERY CO., LTD.,  
a Japanese corporation

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-----  
LICENSE AGREEMENT  
-----

THIS KIRIN BREWERY CO., LTD./KIRIN-AMGEN, INC. LICENSE AGREEMENT ("Agreement") is made and entered into this 4th day of December, 1985, and is made effective as of the 27th day of June, 1985, by and between KIRIN-AMGEN, INC., a California corporation ("Company"), and KIRIN BREWERY CO., LTD., a Japanese corporation ("Kirin").

R E C I T A L S  
-----

A. Kirin desires to obtain from the Company a license to the EPO human (and not nonhuman veterinary) diagnostic and reagent rights (collectively "Diagnostic Rights") in order to exploit the Diagnostic Rights Field of Activity in its Territory (as hereinafter defined) and the Company is willing to grant such a license to Kirin.

B. Company has granted a similar license to Amgen, of even date herewith ("Amgen License"), with respect to the exploitation of the Diagnostic Rights Field of Activity in the United States of America, its territories and possessions, on substantially the same terms and conditions contained herein and for the same purposes described herein.

NOW, THEREFORE, in consideration of the mutual covenants expressed herein and other good and valuable consideration, the parties hereby agree as follows:

ARTICLE I

DEFINITIONS

-----

1.01 Incorporation by Reference. Unless otherwise defined herein, -----  
capitalized terms as used herein shall have the meanings specified in that certain Shareholders' Agreement of Company dated May 11, 1984.

1.02 Diagnostic Rights Field of Activity/Diagnostic Rights  
-----  
Technology. Diagnostic Rights Field of Activity/Diagnostic Rights Technology  
-----  
shall mean the areas of development manufacture, production, use and worldwide commercial sale of EPO human diagnostic and/or reagent products and shall exclude non-human veterinary purposes.

1.03 Territory: "Territory" shall mean the territory composed of the  
-----  
country of Japan.

1.04 Party. "Party" shall mean Kirin or the Company or, when used in  
-----  
the plural, Kirin and the Company.

1.05 Subsidiary: "Subsidiary" shall mean a corporate entity more than  
-----  
50% of the voting stock of which is owned or controlled, directly or indirectly, by Kirin or the Company.

ARTICLE II

GRANT OF LICENSE  
-----

2.01 Grant of License. For the term of this Agreement and subject to  
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the reservations contained in Sections 2.02, 2.03 and 2.04 hereof the Company hereby grants to Kirin a sole and exclusive license to the Diagnostic Rights, for the limited purposes of engaging in the Diagnostic Rights Field of Activity as expanded by Amendment No. 1 to the Shareholders' Agreement and solely for use in the manufacture, use and marketing of the Diagnostic Rights in the Kirin Territory of Japan.

2.02 Rights to Sublicense. The Company also grants to Kirin the right  
-----

to grant sublicenses within and limited to the scope of the right and license granted to the Company in Section 2.01 only (a) to any Subsidiary of Kirin, (b) to customers of Kirin, including marketing and distribution agents, in connection with sales of EPO human diagnostic and reagent products, (c) to a single manufacturer of such diagnostics and reagents, other than Kirin or any subsidiary, for the account of Kirin, and (d) to licensees of Kirin under patents, know-how or materials owned by Kirin to the extent such licensees require any such sublicenses in order to practice the patents or know-how or to use the materials that are the subject of the

license from Kirin; provided, however, that no sublicense shall be granted under clause (c) or (d) hereof without the prior written consent (which consent is not to be unreasonably withheld) of the Company. Any sublicensees of Kirin shall undertake in writing to be bound by the provisions of Section 3.02 hereof to the same extent Kirin is bound. Kirin shall notify the Company of the identity of each sublicensee to whom a sublicense is granted and provide the Company a true copy of such sublicense. In the event that the license granted to Kirin hereunder is terminated at any time in accordance with Article VI, and the Company shall not be in default under Section 6.02 hereof, the Company shall have the option to terminate or to have Kirin assign to the Company, retroactive to the date of such termination, any sublicenses granted hereunder by Kirin to any Subsidiary of Kirin. Kirin shall include, in all its sublicenses granted hereunder to any Subsidiary of Kirin, provisions for such termination and assignment.

2.03 Amgen License. The Company reserves the right to grant a license

-----

to utilize the Diagnostic Rights to Amgen in accordance with the terms of the Amgen License.

2.04 Other Licenses. The Company reserves the right to grant licenses

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to utilize the Diagnostic Rights in a similar manner as provided for EPO in the Shareholders' Agreement.

2.05 License or Royalty Fee. There shall be a one time Two Hundred

-----  
Thousand Dollars (U.S. \$200,000.00) fully paid up license fee paid to the  
Company by Kirin for the grant of the license described in this Article II, but  
there shall be no royalties payable hereunder whatsoever.

ARTICLE III

DISCLOSURE  
-----

3.01 Disclosure.  
-----

(a) The Company shall reasonably disclose and deliver to Kirin  
all Diagnostic Rights Technology in sufficient detail to permit Kirin to employ  
such data for the purposes provided herein.

(b) Kirin shall have the right to attend and participate in the  
Company's technical meetings, conduct plant visits at reasonable intervals and  
receive information concerning the Diagnostic Rights Technology. Kirin shall be  
provided with reasonable notice of the time and place of such meetings.

3.02 Confidentiality.  
-----

(a) Any secret or confidential Diagnostic Rights Technology  
which is disclosed to Kirin pursuant to this

Agreement or the Shareholders' Agreement, shall be designated as confidential information in the following manner:

(i) If the disclosure is in written form, by prominently marking or stamping each document containing such information with a notice indicating the confidential and proprietary nature of the information; and

(ii) If the disclosure is in oral form, by orally stating at the time of such disclosure that the information disclosed is confidential and proprietary and by delivering to Kirin within fifteen (15) days of the oral disclosure written notice confirming the confidential and proprietary nature of the information.

(b) Except to the extent expressly authorized by this Agreement, the Shareholders' Agreement, or by other prior written consent of the Company for the term of this Agreement and thereafter, Kirin shall keep completely confidential and shall not publish or otherwise disclose to others and shall not use any secret or confidential Diagnostic Rights Technology disclosed or provided to Kirin by the Company. For the purposes of this Agreement, Diagnostic Rights Technology shall be deemed not secret or confidential to the extent, and only to the extent, that it:

(i) was known to Kirin at the time of its disclosure and not otherwise subject to an obligation of Kirin to keep such information confidential;

(ii) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(iii) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of Kirin in breach of this Agreement; or

(iv) became known to Kirin after its disclosure (A) from a source other than the Company (including from independent development by Kirin), (B) other than from a third party who had an obligation to the Company not to disclose such information to others, and (C) other than under an obligation of confidentiality. Kirin may disclose any Diagnostic Rights Technology to the extent such disclosure or delivery is necessary for Kirin to comply with laws or regulations, or to make, use or sell under any license granted hereunder by the Company or to sublicense others to do so; provided, that Kirin shall give the Company reasonable advance notice of such proposed disclosure or delivery, shall use its best efforts to secure confidential treatment of the Diagnostic Rights

Technology to be disclosed and shall advise the Company in writing of the manner in which that was done.

(c) The obligation of confidentiality imposed by this Section 3.02 shall survive termination of this Agreement for any reason whatsoever.

ARTICLE IV

PATENT APPLICATIONS AND COPYRIGHT REGISTRATIONS  
-----

4.01 Patent Applications. Kirin shall pay the Company's reasonable  
-----  
costs and expenses (including attorney's fees) incurred to file, prosecute and maintain in force any patent applications or patents of the Diagnostic Rights Technology, which Kirin shall desire the Company to file, prosecute or maintain in the Territory; provided, that, to the extent an application or patent includes subject matter not covering the manufacture, use and sale of products in the Diagnostic Rights Field of Activity, Kirin shall pay an equitable pro rata share of such expenses.

ARTICLE V

PATENT, COPYRIGHT AND TRADE SECRET ENFORCEMENT  
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5.01 Enforcement. Subject to Section 5.03, Kirin shall have the  
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right, but not the obligation, to bring, defend and

maintain any appropriate suit or action involving infringement of any patent or copyright, misappropriation of any trade secret or interference with any other intellectual property right relating to the Diagnostic Rights Technology that Kirin shall have obtained pursuant to this Agreement.

5.02 Infringements. Subject to Section 5.03, Kirin shall have the

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right, but not the obligation, to bring, defend and maintain any appropriate suit or action involving infringement in the Diagnostic Rights Field of Activity of any patent of the Diagnostic Rights Technology covering only the making, use or sale or products or the use of processes in the Diagnostic Rights Field of Activity. If Kirin finds it necessary to join the Company in such suit or action, the Company shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. Kirin shall pay to the Company its reasonable expenses (excluding its attorney's fees) in connection with any such suit or action. Should Kirin lack standing to bring any such action then Kirin may cause the Company to do so upon first undertaking to indemnify and hold the Company harmless (to the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expenses (including attorney fees) stemming therefrom. Any amount recovered in any such

action or suit, whether by judgment or settlement, shall be paid to or retained entirely by Kirin.

5.03 Maintenance of Action. Kirin shall notify the Company of any

-----

material infringement in the Diagnostic Rights Field of Activity of any patent within the Diagnostic Rights Technology covering the making, use or sale of products or the use of processes both within and outside the Diagnostic Rights Field of Activity and shall provide the Company with any available evidence of such infringement. The Company and Kirin shall consult with each other as to the best manner in which to proceed. The Company shall have the first right, but no obligation, to bring or defend any suit or action on any claim involving such infringement of any such patent of the Diagnostic Rights Technology on such terms relating to reimbursement of associated costs and expenses as shall be agreed to. If the Company finds it necessary or desirable to join Kirin in such suit or action, Kirin shall execute all papers and perform such other acts as may be reasonably required to do so and may, at its option be represented by counsel of its choice unless the Company and Kirin otherwise agree, any amount recovered in any such action, whether by judgment or settlement, after payment to the Company of such reasonable costs and expenses (excluding attorney's fees), shall be paid to or retained by Kirin. In the event the

Company fails to take action with respect to such infringement within a reasonable period, no less than six (6) months, following receipt of such notice and evidence, Kirin shall have the right to bring, defend and maintain any appropriate suit or action involving such infringement in the Diagnostic Rights Field of Activity. If Kirin finds it necessary to join the Company in such suit or action, the Company shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. Kirin shall pay to the Company the reasonable expenses of the Company (excluding its attorney's fees) in connection with any such suit or action. Any amount recovered in any such action or suit, whether by judgment or settlement, after payment to the Company of such reasonable costs and expenses (excluding attorney's fees), shall be paid to or retained entirely by Kirin.

ARTICLE VI

TERM AND TERMINATION

-----

6.01. Term. Unless sooner terminated as provided below, the license

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and rights granted under Sections 2.01 and 2.02 hereof under patents shall continue with respect to each

patent of the Diagnostic Rights Technology for the life of that patent.

6.02. Effective Date. This Agreement (including the license and  
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rights granted under Sections 2.01 and 2.02 hereof) shall come into effect as of  
June 27, 1985 and shall remain in full force and effect until the earlier of (a)  
the liquidation or dissolution of the Company other than in connection with a  
continuation of the business of the Company in some other legal form, or (b)  
termination pursuant to either Section 6.03 or 6.04.

6.03. Default. In the event that a Party (the "Defaulting Party")  
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shall (a) fail to make any payment hereunder when and as due, or otherwise  
default in its obligations hereunder and fail to remedy such default within  
sixty (60) days after such default shall have been called to its attention by  
notice from another Party, (b) become bankrupt or insolvent, or file a petition  
in bankruptcy or make a general assignment for the benefit of creditors or  
otherwise acknowledge insolvency, or be adjudged bankruptcy, (c) go or be placed  
in a process of complete liquidation other than in connection with a  
continuation of the business of the Company in come other legal form, or (d)  
suffer the appointment of a receiver for any substantial portion of its business  
who shall not be discharged

within sixty (60) days after his appointment, then, and in any such event, any other Party, at its option, may terminate its obligations to and the rights of the Defaulting Party under this Agreement upon ten (10) day's written notice to the Defaulting Party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

6.04. Survival. Notwithstanding the termination of a Party's

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obligations to or the rights of the Defaulting Party under this Agreement in accordance with the provisions of Sections 6.02, 6.03, the provisions of Section 3.02, this Section 6.04 and Article VII hereof shall survive such termination and continue in full force and effect for an indefinite term. Upon termination of this Agreement for any reason, and without limitation of other remedies, Kirin shall immediately return to the Company (to the extent such return is technically feasible) all Diagnostic Rights Technology in the possession of Kirin or its Subsidiaries, or of which Amgen shall have the right to regain possession or, at the sole election of the Company, shall destroy such Diagnostic Rights Technology (to the extent technically feasible).

ARTICLE VII

INFRINGEMENTS

-----

7.01 Infringements. In the event that Kirin is charged with

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infringement or unauthorized use of the alleged patent rights or proprietary rights of others by reason of the exploitation by Kirin of Diagnostic Rights Technology or any component thereof, then the Company shall indemnify and hold Kirin harmless from such claim to the full extent of any damage recovery with respect to such claim and legal costs incurred in Kirin's defense.

ARTICLE VIII

CONSENTS AND APPROVALS

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8.01. Best Efforts. The parties hereto shall use their best efforts to

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obtain as soon as practicable any and all consents, approvals, orders or authorizations required to be obtained from any governmental authority with respect to the provisions hereof.

ARTICLE IX

NOTICE

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9.01. Notices. All notices, requests, demands and other communications

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required or permitted to be given under this

Agreement shall be in writing and shall be mailed to the Party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return receipt requested, postage prepaid, and properly addressed as follows (in which case such notice shall be deemed to have been duly given on the third (3rd) day following the date of such sending):

"Kirin" Kirin Brewery Company, Limited  
26-1, Jingumae 6-Chome  
Shibuya-Ku, Tokyo 150  
Japan  
Telex No. 242-5401 Kirin B J  
Attn: General Manager of R&D Department

With a copy to: Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 2000  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701357 (MPG LAW UD)  
Attn: Joel S. Marcus, Esq.

"Company" Kirin-Amgen, Inc.  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

With a copy to: Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 2000  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701357 (MPG LAW UD)  
Attn: Joel S. Marcus, Esq.

Any Party by giving notice to the others in the manner provided above may change such Party's address for purposes of this Paragraph 9.01.

ARTICLE X

MISCELLANEOUS

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10.01. Entire Agreement. This Agreement, together with the other

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written agreements between the parties hereto which are referenced in the Shareholders' Agreement and Amendment No. 1 thereto, set forth the entire agreement of the parties with respect to the subject matter hereof and may not be modified except by a writing signed by authorized representatives of the parties hereto. To the extent that there may be conflicts or inconsistencies between the provisions of this Agreement and those contained in the Shareholders' Agreement, the provisions of the Shareholders' Agreement shall prevail and govern interpretation.

10.02. Headings. Article and section headings in this Agreement are

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included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose.

10.03. Execution in Counterparts. This Agreement may be executed in

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any number of counterparts and by different parties hereto in separate counterparts each of which when so executed

and delivered shall be deemed to be an original and all of which counterparts of this Agreement taken together shall constitute but one and the same instrument.

10.04. Force Majeure. It is agreed that each of the Parties hereto is

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excused from performing such acts as are required hereunder as may be prevented by or whose purpose is frustrated by Force Majeure. The Party so affected shall give notice to the other Party in writing promptly and thereupon shall be excused from such of its obligations hereunder as it is unable to perform on account of the Force Majeure throughout the duration thereof plus a period of thirty (30) days.

10.05. Applicable Law. This Agreement shall be governed by and

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construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in such state.

10.06. Assignment on Written Consent. This Agreement shall be binding

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upon and inure to the benefit of the Company and Kirin and their respective successors and assigns to the extent it is assignable. This Agreement may not be assigned in whole or in part by Kirin, except with the prior written consent of the Company or except as part of the sale of the Company's entire business relating to the Field of Activity.

10.07. Severability. In the event any one or more of the provisions

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contained in this Agreement shall be invalid, illegal or unenforceable in any respect, the validity, legality and/or enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. In such event, such invalid provision or provisions shall be validly reformed to as nearly approximate the intent of the Parties as possible and if unreformable, shall be severed and deleted from this Agreement.

10.08. No Waiver. No failure or delay on the part of either Party in

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exercising any right, power or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder or the remedies provided by law.

10.09. Trademarks and Tradenames. The Company grants no rights to

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Kirin in any trademarks or tradenames of the Company or of any of its respective subsidiaries or affiliated companies.

10.10. Indemnity. Kirin hereby (a) releases the Company from any

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obligation to defend, indemnify or save Kirin and its agents and employees harmless from and (b) agrees to defend, indemnify and save the Company harmless from any and all cost, expenses (including attorneys' fees), liabilities, damages and

claims for any injury or death to persons or damage to or destruction of property, or other loss, arising out of or in connection with any product made, used or sold by Kirin or the use by Kirin of the Diagnostic Rights Technology furnished pursuant to any provision hereunder, or otherwise arising out of or related to the performance of this Agreement.

10.11. Other Agreements. Any other provision of this Agreement

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notwithstanding, noting in this Agreement shall obligate the Company to disclose to Kirin any information or to make available to the Kirin any materials in violation of an obligation of secrecy or a limitation of use imposed by a third party from whom such information or materials shall have been received.

10.12 Remedies. No right, power or remedy herein conferred upon or

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reserved to any Party is intended to be exclusive of any other right, power or remedy or remedies, and each and every right, power and remedy of any Party pursuant to this Agreement or now or hereafter existing at law or in equity or by statute or otherwise shall to the extent permitted by law be cumulative and concurrent, and shall be in addition to every other right, power or remedy pursuant to this Agreement, or now or hereafter existing at law or in equity or by statute or otherwise and the exercise or beginning of the exercise by any Party of any one or more of such rights, powers or remedies shall not preclude

the simultaneous or later exercise by any Party of any or all such other rights, powers or remedies.

10.13 Attorneys' Fees and Costs. In the event of any action at law or

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in equity between the Parties hereto to enforce any of the provisions hereof, the unsuccessful party or parties to such litigation shall pay to the successful party or parties all costs and expenses, including actual attorneys' fees, incurred therein by such successful party or parties; and if such successful party or parties shall recover judgment in any such action or proceeding, such costs, expenses and attorneys' fees may be included in and as part of such judgment. The successful party shall be the party who is entitled to recover its costs of suit, whether or not the suit proceeds to final judgment. A party not entitled to recover its costs shall not recover attorneys' fees.

10.14 Number and Gender. Words in the singular shall include the

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plural, and words in a particular gender shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.15 Agreement to Perform Necessary Acts. Each Party agrees to

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perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary to carry out the provisions of this Agreement.

10.16 Representations. Each of the Parties hereto acknowledges and

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agrees (i) that no representation or promise not expressly contained in this Agreement has been made by any other Party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this Agreement is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this Agreement; and (iii) that each has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives in the manner legally binding on them as of the date first above written.

KIRIN BREWERY CO., LTD.,  
a Japanese-Corporation

By /s/ Shinkichi Kubo

-----  
Shinkichi Kubo,  
Senior Managing Director  
"Kirin"

KIRIN-AMGEN, INC.,  
a California corporation

By /s/ George B. Rathmann

-----  
George B. Rathmann, President  
"Company"

EXECUTION COPY

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LICENSE AGREEMENT

by and between

KIRIN-AMGEN, INC.,  
a California corporation

and

AMGEN,  
a California corporation

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AMGEN/KIRIN-AMGEN, INC.  
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LICENSE AGREEMENT  
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THIS AMGEN/KIRIN-AMGEN, INC. LICENSE AGREEMENT is made and entered into this 4th day of December, 1985, and is made effective as of the 27th day of June, 1985, by and between KIRIN-AMGEN, INC., a California corporation ("Company"), and AMGEN, a California corporation ("Amgen").

R E C I T A L S  
- - - - -

A. Amgen desires to obtain from the Company a license to the EPO human (and not non-human veterinary) diagnostic and reagent rights (collectively "Diagnostic Rights") in order to exploit the Diagnostic Rights Field of Activity in its Territory (as hereinafter defined) and the Company is willing to grant such a license to Amgen.

B. Company has granted a similar license to Kirin, of even date herewith ("Kirin License"), with respect to the exploitation of the Diagnostic Rights Field of Activity in Japan, on substantially the same terms and conditions contained herein and for the same purposes described herein.

NOW, THEREFORE, in consideration of the mutual covenants expressed herein and other good and valuable consideration, the parties hereby agree as follows:

ARTICLE I

DEFINITIONS

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1.01 Incorporation by Reference. Unless otherwise defined herein,  
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capitalized terms shall have the meanings specified in that certain  
Shareholders' Agreement of Company dated May 11, 1984.

1.02 Diagnostic Rights Field of Activity/Diagnostic Rights  
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Technology. Diagnostic Rights Field of Activity/Diagnostic Rights Technology  
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shall mean the areas of development manufacture, production, use and worldwide  
commercial sale of EPO human diagnostic and/or reagent products and shall  
exclude nonhuman veterinary purposes.

1.03 Territory. "Territory" shall mean the territory composed of the  
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United States of America, its territories and possessions.

1.04 Party. "Party" shall mean Amgen or the Company or, when used in  
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the plural, Amgen and the Company.

1.05 Subsidiary. "Subsidiary" shall mean a corporate entity more than  
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50% of the voting stock of which is owned or controlled, directly or indirectly,  
by Amgen or the Company.

ARTICLE II

GRANT OF LICENSE  
-----

2.01 Grant of License. For the term of this Agreement and subject to  
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the reservations contained in Sections 2.02, 2.03 and 2.04 hereof, the Company hereby grants to Amgen a sole and exclusive license to the Diagnostic Rights, for the limited purpose of engaging in the Field of Activity as expanded by Amendment No. 1 to the Shareholders' Agreement and solely for use in the manufacture, use and marketing of the Diagnostic Rights in the Amgen Territory.

2.02 Rights to Sublicense. The Company also grants to Amgen the  
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right to grant sublicenses within and limited to the scope of the right and license granted to the Company in Section 2.01 only (a) to any Subsidiary of Amgen, (b) to customers of Amgen, including marketing and distribution agents, in connection with sales of EPO human diagnostic and reagent products, (c) to a single manufacturer of such diagnostics and reagents, other than Amgen or any Subsidiary, for the account of Amgen, and (d) to licensees of Amgen under patents, know-how or materials owned by Amgen to the extent such licensees require any such sublicense in order to practice the patents or know-how or to use the materials that are the subject of the license from Amgen; provided, however, that no sublicense shall be granted under clause (c) or (d) hereof

without the prior written consent (which consent is not to be unreasonably withheld) of the Company. Any sublicensees of Amgen shall undertake in writing to be bound by the provisions of Section 3.02 hereof to the same extent Amgen is bound. Amgen shall notify the Company of the identify (if each sublicensee to whom a sublicense is granted and provide the Company a true copy of such sublicense. In the event that the license granted to Amgen hereunder is terminated at any time in accordance with Article VI, and the Company shall not be in default under Section 6.02, the Company shall have the option to terminate or to have Amgen assign to the Company, retroactive to the date of such termination, any sublicenses granted hereunder by Amgen to any Subsidiary of Amgen. Amgen shall include, in all its sublicenses granted hereunder to any Subsidiary of Amgen, provisions for such termination and assignment.

2.03 Kirin License. The Company reserves the right to grant a license

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to utilize the Diagnostic Rights to Kirin in accordance with the terms of the Kirin License.

2.04 Other Licenses. The Company reserves the right to grant licenses

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to utilize the Diagnostic Rights in a similar manner as provided for EPO in the Shareholders` Agreement.

2.05 License or Royalty Fee. There shall be a one time Two Hundred

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Thousand Dollars (U.S. \$200,000.00) fully paid

up license fee paid to the Company by Amgen for the grant of the license described in this Article II, but there shall be no royalties payable hereunder whatsoever.

ARTICLE III

DISCLOSURE

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3.01 Disclosure.

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(a) The Company shall reasonably disclose and deliver to Amgen all Diagnostic Rights Technology in sufficient detail to permit Amgen to employ such data for the purposes provided herein.

(b) Amgen shall have the right to attend and participate in the Company's technical meetings, conduct plant visits at reasonable intervals and receive information concerning the Diagnostic Rights Technology. Amgen shall be provided with reasonable notice of the time and place of such meetings.

3.02 Confidentiality.

-----

(a) Any secret or confidential Diagnostic Rights Technology which is disclosed to Amgen pursuant to this Agreement or the Shareholders' Agreement, shall be designated as confidential information in the following manner:

(i) If the disclosure is in written form, by prominently marking or stamping each document containing such

information with a notice indicating the confidential and proprietary nature of the information; and

(ii) If the disclosure is in oral form, by orally stating at the time of such disclosure that the information disclosed is confidential and proprietary and by delivering to Amgen within fifteen (15) days of the oral disclosure written notice confirming the confidential and proprietary nature of the information.

(b) Except to the extent expressly authorized by this Agreement, the Shareholders' Agreement, or by other prior written consent of the Company for the term of this Agreement and thereafter, Amgen shall keep completely confidential and shall not publish or otherwise disclose to others and shall not use any secret or confidential Diagnostic Rights Technology disclosed or provided to Amgen by the Company. For the purposes of this Agreement, Diagnostic Rights Technology shall be deemed not secret or confidential to the extent, and only to the extent, that it:

(i) was known to Amgen at the time of its disclosure and not otherwise subject to an obligation of Amgen to keep such information confidential;

(ii) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(iii) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of Amgen in breach of this Agreements; or

(iv) became known to Amgen after its disclosure (A) from a source other than the Company (including from independent development by Amgen), (B) other than from a third party who had an obligation to the Company not to disclose such information to others, and (C) other than under an obligation of confidentiality.

Amgen may disclose any Diagnostic Rights Technology to the extent such disclosure or delivery is necessary for Amgen to comply with laws or regulations, or to make, use or sell under any license granted hereunder by the Company or to sublicense others to do so; provided, that Amgen shall give the Company reasonable advance notice of such proposed disclosure or delivery, shall use its best efforts to secure confidential treatment of the Diagnostic Rights Technology to be disclosed and shall advise the Company in writing of the manner in which that was done.

(c) The obligation of confidentiality imposed by this Section 3.02 shall survive termination of this Agreement for any reason whatsoever.

ARTICLE IV

PATENT APPLICATIONS AND COPYRIGHT REGISTRATIONS  
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4.01 Patent Applications. Amgen shall pay the Company's reasonable  
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costs and expenses (including attorney's fees) incurred to file, prosecute and  
maintain in force any patent applications or patents of the Diagnostic Rights  
Technology which Amgen shall desire the Company to file, prosecute or maintain  
in the Territory; provided, that, to the extent an application or patent  
includes subject matter not covering the manufacture, use and sale of products  
in the Diagnostic Rights Field of Activity, Amgen shall pay an equitable pro  
rata share of such expenses.

ARTICLE V

PATENT, COPYRIGHT AND TRADE SECRET ENFORCEMENT  
-----

5.01 Enforcement. Subject to Section 5.03, Amgen shall have the  
-----  
right, but not the obligation, to bring, defend and maintain any appropriate  
suit or action involving infringement of any patent or copyright,  
misappropriation of any trade secret or interference with any other intellectual  
property right relating to the Diagnostic Rights Technology that Amgen shall  
have obtained pursuant to this Agreement.

5.02 Infringements. Subject to Section 5.03, Amgen shall have the  
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right, but not the obligation, to bring, defend

and maintain any appropriate suit or action involving infringement in the Diagnostic Rights Field of Activity of any patent of the Diagnostic Rights Technology covering only the making, use or sale of products or the use of processes in the Diagnostic Rights Field of Activity. If Amgen finds it necessary to join the Company in such suit or action, the Company shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. Amgen shall pay to the Company its reasonable expenses (excluding its attorney's fees) in connection with any such suit or action. Should Amgen lack standing to bring any such action then Amgen may cause the Company to do so upon first undertaking to indemnify and hold the Company harmless (to the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expenses (including attorney fees) stemming therefrom. Any amount recovered in any such action or suit, whether by judgment or settlement, shall be paid to or retained entirely by Amgen.

5.03 Maintenance of Action. Amgen shall notify the Company of any

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material infringement in the Diagnostic Rights Field of Activity of any patent within the Diagnostic Rights Technology covering the making, use or sale of products or the use of processes both within and outside the Diagnostic Rights

Field of Activity and shall provide the Company with any available evidence of such infringement. The Company and Amgen shall consult with each other as to the best manner in which to proceed. The Company shall have the first right, but no obligation, to bring or defend any suit or action on any claim involving such infringement of any such patent of the Diagnostic Rights Technology on such terms relating to reimbursement of associated costs and expenses as shall be agreed to. If the Company finds it necessary or desirable to join Amgen in such suit or action, Amgen shall execute all papers and perform such other acts as may be reasonably required to do so and may, at its option be represented by counsel of its choice unless the Company and Amgen otherwise agree, any amount recovered in any such action, whether by judgment or settlement, after payment to the Company of such reasonable costs and expenses (excluding attorney's fees), shall be paid to or retained by Amgen. In the event the Company fails to take action with respect to such infringement within a reasonable period, no less than six (6) months, following receipt of such notice and evidence, Amgen shall have the right to bring, defend and maintain any appropriate suit or action involving such infringement in the Diagnostic Rights Field of Activity. If Amgen finds it necessary to join the Company in such suit or action, the Company shall execute all papers and

perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. Amgen shall pay to the Company the reasonable expenses of the Company (excluding its attorney's fees) in connection with any such suit or action. Any amount recovered in any such action or suit, whether by judgment or settlement, after payment to the Company of such reasonable costs and expenses (excluding attorney's fees), shall be paid to or retained entirely by Amgen.

ARTICLE VI

TERM AND TERMINATION

-----

6.01 Term. Unless sooner terminated as provided below, the license

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and rights granted under Sections 2.01 and 2.02 hereof under patents shall continue with respect to each patent of the Diagnostic Rights Technology for the life of that patent.

6.02 Effective Date. This Agreement (including the license and

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rights granted under Sections 2.01 and 2.02 hereof) shall come into effect as of June 27, 1985 and shall remain in full force and effect until the earlier of (a) the liquidation or dissolution of the Company other than in connection with a continuation of the business of the Company in some other legal form, or (b) termination pursuant to either Section 6.03 or 6.04.

6.03 Default. In the event that a Party (the "Defaulting Party")

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shall (a) fail to make any payment hereunder when and as due, or otherwise default in its obligations hereunder and fail to remedy such default within sixty (60) days after such default shall have been called to its attention by notice from another Party, (b) become bankrupt or insolvent, or file a petition in bankruptcy or make a general assignment for the benefit of creditors or otherwise acknowledge insolvency, or be adjudged bankruptcy, (c) go or be placed in a process of complete liquidation other than in connection with a continuation of the business of the Company in some other legal form, or (d) suffer the appointment of a receiver for any substantial portion of its business who shall not be discharged within sixty (60) days after his appointment, then, and in any such event, any other Party, at its option, may terminate its obligations to and the rights of the Defaulting Party under this Agreement upon ten (10) days' written notice to the Defaulting Party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

6.04 Survival. Notwithstanding the termination of a Party's

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obligations to or the rights of the Defaulting Party under this Agreement in accordance with the provisions of Sections 6.02, 6.03, the provisions of Section 3.02, this Section 6.04 and

Article VII hereof shall survive such termination and continue in full force and effect for an indefinite term. Upon termination of this Agreement for any reason, and without limitation of other remedies, Amgen shall immediately return to the Company (to the extent such return is technically feasible) all Diagnostic Rights Technology in the possession of Amgen or its Subsidiaries, or of which Amgen shall have the right to regain possession or, at the sole election of the Company, shall destroy such Diagnostic Rights Technology (to the extent technically feasible).

ARTICLE VII

INFRINGEMENTS

-----

7.01 Infringements. In the event that Amgen is charged with

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infringement or unauthorized use of the alleged patent rights or proprietary rights of others by reason of the exploitation by Amgen of Diagnostic Rights Technology or any component thereof, then the Company shall indemnify and hold Amgen harmless from such claim to the full extent of any damage recovery with respect to such claim and legal costs incurred in Amgen's defense.

ARTICLE VIII

CONSENTS AND APPROVALS  
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8.01 Best Efforts. The parties hereto shall use their best efforts  
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to obtain as soon as practicable any and all consents, approvals, orders or  
authorizations required to be obtained from any governmental authority with  
respect to the provisions hereof.

ARTICLE IX

NOTICE  
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9.01 Notices. All notices, requests, demands and other  
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communications required or permitted to be given under this Agreement shall be  
in writing and shall be mailed to the Party to whom notice is to be given, by  
telex or facsimile, and confirmed by first class mail, registered or certified,  
return receipt requested, postage prepaid, and properly addressed as follows (in  
which case such notice shall be deemed to have been duly given on the third  
(3rd) day following the date of such sending):

"Amgen" Amgen  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320  
U.S.A.  
Telex No. 499-9315 (AMGEN)  
Attn: Corporate Secretary

With a copy to: Cooley, Godward, Castro,  
Huddleson & Tatum  
One Maritime Plaza, 20th Floor  
San Francisco, CA 94111  
U.S.A.  
Telex No. 910-372-7370 Cooley SFO  
Attn: Alan C. Mendelson, Esq.

"Company" Kirin-Amgen, Inc.  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

With a copy to: Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 2000  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701357 (MPG LAW UD)  
Attn: Joel S. Marcus, Esq.

Any Party by giving notice to the others in the manner provided above may change such Party's address for purposes of this Paragraph 9.01.

ARTICLE X

MISCELLANEOUS

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10.01 Entire Agreement. This Agreement, together with the other

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written agreements between the parties hereto which are referenced in the Shareholders' Agreement and Amendment No. 1

thereto, set forth the entire agreement of the parties with respect to the subject matter hereof and may not be modified except by a writing signed by authorized representatives of the parties hereto. To the extent that there may be conflicts or inconsistencies between the provisions of this Agreement and those contained in the Shareholders' Agreement, the provisions of the Shareholders' Agreement shall prevail and govern interpretation.

10.02 Headings. Article and section headings in this Agreement are -----  
included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose.

10.03 Execution in Counterparts. This Agreement may be executed in -----  
any number of counterparts and by different parties hereto in separate counterparts each of which when so executed and delivered shall be deemed to be an original and all of which counterparts of this Agreement taken together shall constitute but one and the same instrument.

10.04 Force Majeure. It is agreed that each of the Parties hereto is -----  
excused from performing such acts as are required hereunder as may be prevented by or whose purpose is frustrated by Force Majeure. The Party so affected shall give notice to the other Party in writing promptly and thereupon shall be excused from such of its obligations hereunder as it is unable

to perform on account of the Force Majeure throughout the duration thereof plus a period of thirty (30) days.

10.05 Applicable Law. This Agreement shall be governed by and

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construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in such state.

10.06 Assignment on Written Consent. This Agreement shall be binding

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upon and inure to the benefit of the Company and Amgen and their respective successors and assigns to the extent it is assignable. This Agreement may not be assigned in whole or in part by Amgen, except with the prior written consent of the Company or except as part of the sale of the Company's entire business relating to the Field of Activity.

10.07 Severability. In the event any one or more of the provisions

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contained in this Agreement shall be invalid, illegal or unenforceable in any respect, the validity, legality and/or enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby. In such event, such invalid provision or provisions shall be validly reformed to as nearly approximate the intent of the Parties as possible and if unreformable, shall be severed and deleted from this Agreement.

10.08 No Waiver. No failure or delay on the part of either Party in

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exercising any right, power or remedy hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder or the remedies provided by law.

10.09 Trademarks and Tradenames. The Company grants no rights to

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Amgen in any trademarks or tradenames of the Company or of any of its respective subsidiaries or affiliated companies.

10.10 Indemnity. Amgen hereby (a) releases the Company from any

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obligation to defend indemnify or save Amgen and its agents and employees harmless from and (b) agrees to defend, indemnify and save the Company harmless from any and all cost, expenses (including attorneys' fees), liabilities, damages and claims for any injury or death to persons or damage to or destruction of property, or other loss, arising out of or in connection with any product made, used or sold by Amgen or the use by Amgen of any Diagnostic Rights Technology furnished pursuant to any provision hereunder, or otherwise arising out of or related to the performance of this Agreement.

10.11 Other Agreements. Any other provision of this Agreement

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notwithstanding, nothing in this Agreement shall

obligate the Company to disclose to Amgen any information or to make available to the Amgen any materials in violation of an obligation of secrecy or a limitation of use imposed by a third party from whom such information or materials shall have been received.

10.12 Remedies. No right, power or remedy herein conferred upon or

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reserved to any Party is intended to be exclusive of any other right, power or remedy or remedies, and each and every right, power and remedy of any Party pursuant to this Agreement or now or hereafter existing at law or in equity or by statute or otherwise shall to the extent permitted by law be cumulative and concurrent, and shall be in addition to every other right, power or remedy pursuant to this Agreement, or now or hereafter existing at law or in equity or by statute or otherwise and the exercise or beginning of the exercise by any Party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by any Party of any or all such other rights, powers or remedies.

10.13 Attorneys' Fees and Costs. In the event of any action at law

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or in equity between the Parties hereto to enforce any of the provisions hereof, the unsuccessful party or parties to such litigation shall pay to the successful party or parties all costs and expenses, including actual attorneys' fees, incurred therein by such successful party or parties; and

if such successful party or parties shall recover judgment in any such action or proceeding, such costs, expenses and attorneys' fees may be included in and as part of such judgment. The successful party shall be the party who is entitled to recover its costs of suit, whether or not the suit proceeds to final judgment. A party not entitled to recover its costs shall not recover attorneys' fees.

10.14 Number and Gender. Words in the singular shall include the  
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plural, and words in a particular gender, shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.15 Agreement to Perform Necessary Acts. Each Party agrees to  
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perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary to carry out the provisions of this Agreement.

10.16 Representations. Each of the Parties hereto acknowledges and  
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agrees (i) that no representation or promise not expressly contained in this Agreement has been made by any other Party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this Agreement is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the

subject matter hereof, other than those which are set forth expressly in this Agreement; and (iii) that each has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives in the manner legally binding on them as of the date first above written.

AMGEN, a California corporation

By /s/George B. Rathmann

-----  
George B. Rathmann,  
President

"Amgen"

KIRIN-AMGEN, INC.,  
a California corporation

By /s/Shinkichi Kubo

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Shinkichi Kubo,  
Chairman

"Company"

AMENDMENT NO. 2  
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TO  
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SHAREHOLDERS' AGREEMENT  
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OF  
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KIRIN-AMGEN, INC.  
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THIS AMENDMENT NO. 2 ("Amendment No. 2") TO THAT CERTAIN SHAREHOLDERS' AGREEMENT OF KIRIN-AMGEN, INC., DATED MAY 11, 1984 is made and entered into this 29th day of July, 1985, and is effective as of the 1st day of July, 1985, by and among KIRIN BREWERY COMPANY, LTD., a Japanese corporation ("Kirin"), AMGEN, a California corporation ("Amgen"), and KIRIN-AMGEN, INC., a California corporation ("K-A").

R E C I T A L  
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Pursuant to Paragraph 22.19 of the Shareholders' Agreement regarding expansion of the business of K-A, Kirin and Amgen desire to expand K-A's business into the research and development of Thrombopoietin including, without limitation, any and all rights therein and thereto (collectively, "TPO").

NOW, THEREFORE, it is agreed as follows:

1. TPO: EXPANSION OF CORPORATION'S BUSINESS OPPORTUNITIES  
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Kirin and Amgen hereby agree that Paragraph 2.06 of the Shareholders' Agreement shall be expanded to include the research and development of TPO and the ultimate production and marketing of TPO.

2. TPO RESEARCH AND DEVELOPMENT  
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Subject only to the conditions of (i) the simultaneous establishment of the Pluripoietin project by and between Kirin and Amgen, and (ii) the execution on or before October 31, 1985 by K-A and a third party of a License Agreement with respect to erythropoietin for human therapeutic uses in certain territories, K-A shall commence the research and development of TPO. Kirin and Amgen agree

that they will fund equally, on a 50-50 basis, the research and development of TPO until the earlier occurrence of October 31, 1985 or the satisfaction of the conditions set forth in this paragraph. If the conditions are satisfied on or before October 31, 1985, then K-A will reimburse Amgen and Kirin for any and all expenditures made by them regarding the research and development of TPO between July 1, 1985 and the date of satisfaction of the conditions. If the conditions have not been satisfied on or before October 31, 1985, then all funding obligations of Kirin and Amgen shall cease and Kirin and Amgen shall discuss the continuation and further funding of the research and development of TPO pursuant to this Amendment No. 2. Amgen and Kirin shall use their best efforts to agree on such continuation and funding; provided that, if Kirin and Amgen are unable to reach agreement on or before November 15, 1985, then their obligations hereunder shall terminate and have no further force and effect as of November 15, 1985.

3. CONSISTENCY WITH SHAREHOLDERS' AGREEMENT AND RATIFICATION  
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The rights and obligations of the parties with respect to this Amendment No. 2 as an additional expansion of K-A's business opportunities are otherwise consistent with the provisions of the Shareholders' Agreement. All other terms and conditions of the Shareholders' Agreement are hereby confirmed and ratified in all respects.

4. FURTHER INSTRUMENTS  
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Each party hereto agrees to perform any and all further acts and execute and deliver any and all further documents and/or instruments which may be reasonable or necessary to carry out the provisions of this Amendment No. 2 to the Shareholders' Agreement and to carry out this further business purpose of K-A.

IN WITNESS WHEREOF, the undersigned have caused this Amendment No. 2 to be executed on July 29, 1985 by their duly authorized representatives in the manner legally binding upon them.

KIRIN BREWERY COMPANY, LTD.,  
a Japanese corporation

By /s/Shinkichi Kubo  
-----  
Shinkichi Kubo,  
Senior Managing Director

"Kirin"

AMGEN, a California corporation

By /s/George B. Rathmann  
-----  
George B. Rathmann,  
President

"Amgen"

KIRIN-AMGEN, INC.  
a California corporation

BY /s/Tasuhiko Kaneko

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Its

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"K-A"

AMENDMENT NO. 3  
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TO  
--  
SHAREHOLDERS' AGREEMENT  
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OF  
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KIRIN-AMGEN, INC.  
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THIS AMENDMENT NO. 3 TO THAT CERTAIN SHAREHOLDERS' AGREEMENT OF KIRIN-AMGEN, INC., DATED MAY 11, 1984, as previously amended ("Amendment No. 3"), is made and entered into this 19th day of December, 1985 by and among KIRIN BREWERY

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COMPANY, LTD., a Japanese corporation ("Kirin"), AMGEN, a California corporation ("Amgen"), and KIRIN-AMGEN, INC., a California corporation ("Corporation").

R E C I T A L S  
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A. Kirin and Amgen mutually agree that their relationship with respect to EPO has been beneficial to both companies and wish to adopt this Amendment No. 3 to clarify their agreements with respect to TPO and PPO.

B. This Amendment No. 3 relates to certain agreements with respect to TPO (as defined in Amendment No. 2 to the Shareholders' Agreement) and PPO (as defined in that certain Research, Development, Technology Disclosure and License Agreement: PPO between Kirin and Amgen) and the manufacture, production and world-wide commercial sale of TPO and PPO products.

NOW, THEREFORE, it is agreed as follows:

1. CERTAIN AGREEMENTS WITH RESPECT TO TPO AND PPO  
-----

1.01 It is agreed that Kirin shall have an exclusive license with respect to TPO and PPO in the territory of Japan and Amgen shall have an exclusive license with respect to TPO and PPO in the territory of the United States. The initial royalty rate, which is subject to adjustment as set forth below, shall be 5% of net sales of TPO and/or PPO products from each Kirin and Amgen to Corporation.

1.02 The parties agree that the initial royalty rate established in Paragraph 1.01 above may be subject to adjustment when TPO and/or PPO are further along in their development and/or marketing stage. Only at such time will the parties be able to more fully understand the potential market and economic implications of the initial royalty rate established herein.

1.03 The parties agree that the final royalty rate to be mutually agreed upon and embodied in definitive license agreements among the parties may involve a maximum royalty rate of five percent (5%) down to zero (0). The parties may agree upon different royalty rates (e.g. Kirin 3%; Amgen 5%), the same royalty rate (but different than the initial royalty rate), or the initial royalty rate may remain unchanged.

2. THIRD PARTY MATTERS: OWNERSHIP RIGHTS  
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The parties agree that Corporation shall bear and pay for royalty obligations to third parties with respect to asserted ownership rights to TPO and/or PPO Technology which would otherwise be required from Amgen and/or Kirin. Such third party royalty payments shall be an obligation of Corporation (in addition to any royalty payments which K-A is otherwise obligated to make). It is agreed that the right to reach agreement with a third party respecting this matter shall be handled by the shareholder(s) whose territory(ies) is (are) affected. For example, if any third party person and/or entity makes a claim for TPO and/or PPO royalty payments and it affects only the territory of Japan, Kirin shall have the sole responsibility of negotiating a third party royalty rate payable by K-A which shall be binding on all parties hereto.

3. PPO TECHNOLOGY  
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The parties agree that upon the successful completion of the R & D Project for PPO, as more fully set forth in the Research, Development, Technology Disclosure and License Agreement: PPO, all rights in and to the PPO Technology shall be promptly licensed and/or transferred to Corporation. Additionally, Amgen shall, at that time, exclusively license to Corporation on a royalty-free world-wide basis its Core Technology relating to PPO.

4. FURTHER INSTRUMENTS  
-----

Each party hereto agrees to perform any and all further acts and execute and deliver any and all further documents and/or instruments which may be reasonable or necessary to carry out the provisions and purposes of this Amendment No. 3 to the Shareholders' Agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the undersigned have caused this Amendment No. 3 to be executed as of the first date written above by their duly authorized representatives in a manner legally binding upon them.

KIRIN BREWERY COMPANY, LTD.,  
a Japanese corporation

By /s/Shinkichi Kubo  
-----  
Shinkichi Kubo, Senior  
Managing Director

"Kirin"

AMGEN, a California corporation

By /s/George B. Rathmann  
-----  
George B. Rathmann, President

"Amgen"

KIRIN-AMGEN, INC.,  
a California corporation

By /s/Shinkichi Kubo  
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Shinkichi Kubo Its Chairman  
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"Corporation"

PRODUCT LICENSE AGREEMENT

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THIS PRODUCT LICENSE AGREEMENT entered into this 30th day of September, 1985, by and between AMGEN, a California corporation having offices at 1900 Oak Terrace Lane, Thousand Oaks, California 91320-1789 (said corporation hereinafter referred to as "AMGEN") and ORTHO PHARMACEUTICAL CORPORATION, a New Jersey corporation having offices at U.S. Route 202, Raritan, New Jersey 08869, (said corporation hereinafter referred to as "ORTHO").

WITNESSETH:

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WHEREAS, AMGEN represents that it has developed and is continuing to develop technology relating to certain genetically-engineered health-care products and processes for their manufacture;

WHEREAS, AMGEN further represents that it is the owner of patent applications by assignment and unpatented know-how covering said genetically-engineered health-care products;

WHEREAS, ORTHO and AFFILIATES are engaged in the research, development and sale of health care products throughout the world and wish to obtain certain rights to such technology and to such patents and patent applications;

WHEREAS, ORTHO and AMGEN have entered into a TECHNOLOGY LICENSE AGREEMENT on even date herewith for the research, development and regulatory approval of various products;

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein recited, and other good and valuable considerations, the receipt of which is acknowledged, it is agreed as follows:

ARTICLE 1

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DEFINITIONS

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For the purposes of this Agreement, the terms set forth in this Article I shall have the following meanings:

1.01 "AFFILIATE" shall mean and include (i) any company which owns or controls directly or indirectly at least forty percent (40%) of the voting stock of ORTHO and (ii) any other company at least forty percent (40%) of whose voting stock is

owned or controlled directly or indirectly by such owning or controlling company, and (iii) any other company with which ORTHO or such an owning, owned, controlling or controlled company has a co-marketing, joint venture or distribution agreement for pharmaceuticals outside the United States. The term "ORTHO" shall also mean and include any AFFILIATE wherein the inclusion of same shall be warranted under the provisions of the AGREEMENT.

1.02 "AGREEMENT" shall mean this Product License Agreement.

1.03 "CLOSING" shall occur when, :

(a) AMGEN shall execute and deliver to ORTHO this AGREEMENT and a TECHNOLOGY LICENSE AGREEMENT.

(b) ORTHO shall execute and deliver to AMGEN this AGREEMENT and the TECHNOLOGY LICENSE AGREEMENT; and

(c) The following approvals shall have been obtained: (i) the Executive Committee or the Board of Directors of AMGEN shall have authorized AMGEN's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and the TECHNOLOGY LICENSE AGREEMENT; and (ii) the Board of Directors of ORTHO shall have authorized ORTHO's participation in, and its execution and delivery of,

this AGREEMENT, including the Exhibits attached hereto and the TECHNOLOGY LICENSE AGREEMENT.

1.04 "EFFECTIVE DATE" shall be contingent on certain events and shall mean the date on which this AGREEMENT takes effect which shall be without interruption and simultaneous with the termination of and in accordance with the provisions of Article 9 of the TECHNOLOGY LICENSE AGREEMENT; provided that, if this AGREEMENT takes effect as a result of the receipt of an approval letter to market a LICENSED PRODUCT in a MAJOR COUNTRY or if upon the conclusion of the ten (10) year period there is a pending but as yet unapproved NDA or corresponding registration in any MAJOR COUNTRY, this AGREEMENT shall then be in effect in the entire LICENSED TERRITORY with respect to said PRODUCT. If there is not an approved NDA or corresponding registration in a MAJOR COUNTRY but such approval has been granted to permit marketing of a LICENSED PRODUCT and sales of said LICENSED PRODUCT commence in another country in the TERRITORY, this AGREEMENT shall not come into effect but the payment provisions of Article 4 of this AGREEMENT shall be followed with respect to the sale of LICENSED PRODUCTS in said country.

1.05 "EPO" shall mean erythropoietin as described in Exhibit A.

1.06 "FDA" shall mean the United States Food & Drug Administration and foreign counterparts thereof.

1.07 "GROSS AMOUNT" shall mean NET SALES less all costs related to manufacturing and packaging the LICENSED PRODUCTS into a finished marketable condition.

1.08 "HEPATITIS B" shall mean the recombinant yeast-derived hepatitis B surface antigen vaccine as described in Exhibit B and any other Hepatitis B vaccine development resulting from the Development Program as described in Paragraph 3.01 of the TECHNOLOGY LICENSE AGREEMENT or a supplement of said Program.

1.09 "IL-2" shall mean the recombinant-methionyl human interleukin 2[alanine 125] as described in Exhibit C.

1.10 "LICENSED FIELD" shall mean and include:

(a) with respect to EPO: all indications for human use except dialysis and diagnostics;

(b) with respect to HEPATITIS B and IL-2: all indications for human use except diagnostics.

1.11 "LICENSED KNOW-HOW" shall mean and include any and all data, information, technology or special ability on the part of AMGEN including, but not limited to, processes, techniques, methods, products, materials and compositions relating to the research, development, manufacture, testing or use of EPO, HEPATITIS B and IL-2, now owned or controlled by AMGEN or that shall be owned or controlled by AMGEN during the term of this AGREEMENT, which is reasonably related to LICENSED PATENTS and LICENSED PRODUCTS for use in the LICENSED FIELD; and which is useful in seeking approval from appropriate governmental health authorities to market LICENSED PRODUCTS and which includes AMGEN's INDs, NDAs and all supplements thereto covering PRODUCTS in the LICENSED FIELD.

1.12 "LICENSED PATENTS" shall mean:

(a) any patent listed in Exhibit D;

(b) any patent application listed in Exhibit D, and any division, continuation, or continuation-in-part of any such application, and any patent which shall issue based on such application, division, continuation or continuation-in-part;

(c) any patent which is a reissue or extension of, or a patent of addition to, any patent defined in (a) or any application maturing into a patent defined in (b) above;

(d) any patent application or patent corresponding to any patent application or patent identified in (a), (b) or (c) above which is hereafter filed or issued in any country; and

(e) any patent application related to or based on any of AMGEN's technical information developed in the LICENSED FIELD during the performance of this AGREEMENT, and any division, continuation or continuation-in-part of any such application; and any patent which shall issue based on such application, division, continuation or continuation-in-part; and any patent which is a reissue or extension of, or a patent of addition to, any such patent.

1.13 "LICENSED PRODUCTS" shall mean and include any PRODUCTS for use in the LICENSED FIELD (i) which are within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (ii) whose use is within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iii) which are manufactured or packaged within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iv) which utilize any LICENSED KNOW-HOW.

1.14 "LICENSED TERRITORY" shall mean and include:

- (a) with respect to EPO: the United States, its territories and possessions, including the Commonwealth of Puerto Rico;
- (b) with respect to HEPATITIS B: the entire world except China;
- (c) with respect to IL-2: the entire world.

1.15 "MAJOR COUNTRY" shall mean any of the following: United States, United Kingdom, West Germany, France and Japan.

1.16 "NDA" shall mean a New Drug Application and/or a Product License Application and all supplements filed pursuant to the requirements of the FDA, including all documents, data and other information concerning LICENSED PRODUCTS which are necessary for, or included in, FDA approval to market LICENSED PRODUCTS and foreign counterparts thereof of NDAs.

1.17 "NET SALES" shall mean the amount billed by ORTHO, or an AFFILIATE from the sale of LICENSED PRODUCTS to independent third parties less: (i) discounts, including cash discounts, or rebates actually allowed or granted from the billed amount, (ii) credits or allowances actually granted upon claims or returns

regardless of the party requesting the return, (iii) freight charges paid for delivery, and (iv) taxes or other government charges levied on or measured by the billing amount whether absorbed by the billing or the billed party. In the event that LICENSED PRODUCTS are sold in the form of a combination product containing one or more active ingredients, other than EPO, HEPATITIS B or IL-2, NET SALES for such combination products will be calculated by multiplying actual NET SALES of such LICENSED PRODUCTS by the fraction  $A/(A+B)$  where A is the invoice price of the LICENSED PRODUCT if sold separately and B is the total invoice price of any other active component or components in the combination if sold separately by ORTHO or a single AFFILIATE. If on a country-by-country basis the LICENSED PRODUCT and the other active component or components in the combination are not sold separately in said country by ORTHO or a single AFFILIATE, NET SALES for purposes of determining royalties on the combination shall be calculated by multiplying NET SALES of the combination by the fraction  $C/(C+D)$  where C is ORTHO's or AFFILIATE's total actual cost of LICENSED PRODUCT at the point of formulation into the combination product and D is ORTHO's or AFFILIATE's total actual cost of the other active ingredient(s) included in the combination product at such point.

1.18 "OUTSIDE RESEARCH PAYMENTS" shall mean amounts paid under the TECHNOLOGY LICENSE AGREEMENT or this AGREEMENT for clinical testing by ORTHO to an individual or individuals or to an entity other than AMGEN, ORTHO or an AFFILIATE for purposes of independent evaluation of any of the PRODUCTS, which data shall be used by ORTHO and/or AMGEN in filing NDAs or other registrations regarding the PRODUCTS.

1.19 "NET PRE-TAX AMOUNT" shall mean the GROSS AMOUNT less all current operating expenses (which operating expenses shall not include manufacturing and packaging as deducted in GROSS AMOUNT nor costs recovered by ORTHO under Paragraphs 4.01 A (iii), 4.01 B (iii) and 4.01 C (iii) of this AGREEMENT) but before income taxes. Any recovery under Paragraphs 4.01 A (iii), 4.01 B (iii) and 4.01 C (iii) by ORTHO shall be made from the GROSS AMOUNTS separate from operating expenses but before determining NET PRE-TAX AMOUNT.

1.20 "PRODUCT ORGANISMS" shall mean any and all organisms developed or acquired by AMGEN, the uses of which are licensed to ORTHO pursuant to this AGREEMENT and which have been genetically engineered to produce biologically active LICENSED PRODUCTS, including any and all improvements thereon.

1.21 "PRODUCTS" shall mean IL-2, HEPATITIS B, and EPO for all human uses in the LICENSED FIELD. Wherever a reference is made to the "PRODUCT" or to the "PRODUCTS", the reference shall apply to each of IL-2, HEPATITIS B and EPO severally, unless the context shall indicate otherwise. Whenever the provisions of this AGREEMENT differ in application to any of IL-2, HEPATITIS B or EPO, then such product shall be identified separately, rather than being referred to as a "PRODUCT".

1.22 "TECHNOLOGY LICENSE AGREEMENT" shall mean an agreement between AMGEN and ORTHO executed on even date herewith.

1.23 "VALID LICENSED CLAIM" shall mean and include a claim in an issued LICENSED PATENT which has not lapsed or become abandoned and which claim has not been declared invalid by an unreversed or unappealable decision or judgment of a court of competent jurisdiction.

ARTICLE 2

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LICENSE  
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2.01 GRANT

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(a) AMGEN hereby grants to ORTHO but not AFFILIATES, except as hereinafter provided, an exclusive license to make in one location, have made and use LICENSED KNOW-HOW, LICENSED PATENTS and LICENSED PRODUCTS in the LICENSED TERRITORY in the LICENSED FIELD and to sell LICENSED PRODUCTS in the LICENSED TERRITORY.

(b) AMGEN, having received the consent of Kirin Brewery Co., Ltd., hereby grants to ORTHO but not AFFILIATES, an exclusive license, except as against AMGEN's rights under this AGREEMENT in the LICENSED TERRITORY, to make EPO in one location in the United States for use and sale outside the LICENSED TERRITORY but not including China and Japan. AMGEN shall provide to ORTHO all information and any assistance and know-how required for ORTHO to achieve the purposes of this paragraph at the earlier of the demonstration of Clinical Efficacy of EPO as defined in the TECHNOLOGY LICENSE AGREEMENT or the completion of PHASE II studies as set forth in an agreement between ORTHO and KIRIN-AMGEN designated "Technology License Agreement" dated September 30, 1985.

2.02 SUBLICENSE

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ORTHO may, with prior written notice to AMGEN, sublicense LICENSED PATENTS, LICENSED KNOW-HOW and LICENSED PRODUCTS under this AGREEMENT (i) to any AFFILIATE, or any third party, to use and sell LICENSED PRODUCTS as provided in this AGREEMENT; and (ii) to any one controlled AFFILIATE to make in one location, use and sell LICENSED PRODUCTS as provided in this AGREEMENT. If ORTHO requests the right to sublicense one additional AFFILIATE to make in one location, use and sell LICENSED PRODUCTS as provided in this AGREEMENT, AMGEN shall not unreasonably withhold its consent thereto.

2.03 ASSURANCE BY ORTHO

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In the event of sublicensing as provided in Paragraph 2.02, ORTHO shall assure AMGEN that this AGREEMENT shall apply to such AFFILIATE or third party sublicensee, and such AFFILIATE or third party sublicensee shall deliver to AMGEN a written promise to comply with the terms of this AGREEMENT to the extent that such terms are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities under this AGREEMENT as applied to such AFFILIATE or third party sublicensee.

2.04 DIRECT AGREEMENT

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As a substitute for a sublicense, AMGEN shall, if ORTHO so requests, enter into a separate agreement with any AFFILIATE granting a license in accordance with the provisions of this AGREEMENT. Such agreement shall incorporate all of the terms of this AGREEMENT to the extent that they are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities by the AFFILIATE under such separate agreement.

2.05 WARRANTY

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AMGEN warrants and represents that it has the full right and power to grant the license set forth in Paragraph 2.01 of this Article 2 and that there are no outstanding agreements, assignments or encumbrances in existence inconsistent with the provisions of this AGREEMENT including, without limitation as to generality, any obligations to governmental agencies or private foundations resulting from acceptance of research grant monies, or otherwise.

2.06 ORTHO EFFORTS

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ORTHO agrees to use reasonable efforts to market and sell LICENSED PRODUCTS in the LICENSED TERRITORY.

2.07 IMPROVEMENTS

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2.07.1 If AMGEN, on the one hand, or ORTHO and/or its AFFILIATES and sublicensee(s), on the other hand, improve the PRODUCT ORGANISMS, and/or the LICENSED KNOW-HOW, or make LICENSED PRODUCTS or process improvements, all such improvements shall become part of the LICENSED KNOW-HOW and shall be promptly transferred and/or communicated to the other party in order to maintain parity among AMGEN, ORTHO and its AFFILIATES and sublicensees and by the provisions hereof shall be deemed to be a part of the LICENSED PATENTS or LICENSED KNOW-HOW as the case may be and licensed to AMGEN or ORTHO, as the case may be, on a royalty-free basis.

2.07.2 Notwithstanding any provision of this AGREEMENT, any technology and/or improvements developed by a party to this AGREEMENT and disclosed or licensed under this Article 2, shall be and remain the property of the developing party. This Paragraph 2.07.2 shall survive any termination of this AGREEMENT.

ARTICLE 3

REGULATORY MATTERS

3.01 PENDING NDA

In the event, on the effective date of this AGREEMENT, an NDA approval letter from the FDA has not been received but an NDA or corresponding registration is pending in a MAJOR COUNTRY for any one or more of the PRODUCTS, this AGREEMENT takes effect and the process seeking said approval letter shall be diligently continued and pursued by the appropriate party as set forth in the TECHNOLOGY LICENSE AGREEMENT.

3.02 RECORDS AND PROGRESS

ORTHO and AMGEN shall keep and maintain complete and accurate records of all work including all FDA filings that either has done in connection with LICENSED PRODUCTS. The parties agree to provide each other with sufficient technical information and assistance as is necessary for each of them to assess the progress of the other party in its clinical testing of PRODUCTS and in its filing and pursuit of INDs and NDAs in connection with LICENSED PRODUCTS including but not limited to AMGEN informing ORTHO of all communications and discussions with the FDA.

3.03 ACCESS TO FDA FILES

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(i) With respect to EPO, AMGEN and ORTHO agree that each shall have access to and the exclusive and irrevocable right to refer to and cross-reference each other's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and the TECHNOLOGY LICENSE AGREEMENT and with respect to AMGEN not for any purpose other than dialysis and each agrees to provide all appropriate documentation necessary to achieve the purposes of this AGREEMENT. The parties agree to notify the FDA of the right to cross-reference the above-described documents and to execute and file all the necessary papers and documents required to allow each to exercise its rights under this AGREEMENT.

(ii) With respect to HEPATITIS B and IL-2, AMGEN and ORTHO agree that ORTHO shall have access to and the exclusive and irrevocable right to refer to and cross-reference AMGEN's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and AMGEN agrees to provide all appropriate documentation to achieve the purposes of this AGREEMENT. AMGEN further agrees, upon request by ORTHO, to further notify the FDA of ORTHO's right to cross-reference the above-described

documents and to execute and file all the necessary papers and documents required to allow ORTHO to exercise its rights under this AGREEMENT.

(iii) With respect to HEPATITIS B, AMGEN and ORTHO agree that AMGEN shall have access to and the exclusive and irrevocable right to refer to and utilize ORTHO's INDs, NDAs and supplements thereto provided that AMGEN demonstrates such is necessary for it to pursue its registration of HEPATITIS B in China and for no other purpose.

3.04 CONTINUING OBLIGATIONS  
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During the term of this AGREEMENT, AMGEN and ORTHO each shall have a continuing obligation to advise each other of any adverse drug reactions or any governmental regulatory problems, notices, actions or communications and to keep all INDs, NDAs and supplements thereto current and in full force and effect relating to the manufacture, use, and/or sale of LICENSED PRODUCTS.

ARTICLE 4

ROYALTIES

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4.01 PAYMENTS

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Royalties on LICENSED PRODUCTS shall be paid as set forth below:

A. With respect to EPO:

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- (i) ORTHO shall pay AMGEN 5% of its NET SALES in the United States of EPO LICENSED PRODUCTS;
- (ii) ORTHO shall retain for its own benefit 5% of its NET SALES in the United States of EPO LICENSED PRODUCTS;
- (iii) After the royalty payments set forth in (i) and (ii) above have been made, any remaining GROSS AMOUNTS received from the sale of EPO LICENSED PRODUCTS shall be retained by ORTHO and applied in sequence as follows:
  - (a) the equivalent of up to 100% of the EPO royalty payments made by ORTHO to AMGEN

under paragraph 5.01 of the TECHNOLOGY LICENSE AGREEMENT, provided that no more than 10% of said total payments shall be recoverable by ORTHO in any one (1) calendar year.

- (b) the equivalent of up to 100% of the EPO research and development payments made by ORTHO to AMGEN under paragraph 3.02 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.
  - (c) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to EPO incurred by ORTHO in accordance with Article 4 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.
- (iv) After the recovery payments in (iii) (b) and (iii) (c) above have been fully satisfied for costs incurred prior to NDA approval in the United States of both indications, costs of studies ongoing at the time of such approval and

costs of studies requested by the FDA at the time of such approval, the royalty payments in (i) and (ii) above shall cease and before any royalty payments based on further sales are made to AMGEN, ORTHO shall retain its appropriate payment as set forth in (iii) (a) and then ORTHO shall pay to AMGEN a single royalty payment equal to 10% of NET SALES in the United States of EPO LICENSED PRODUCTS.

(v) After the payments in (iv) above have been made, ORTHO shall retain the total remainder of the monies received as a result of the sale in the United States of EPO LICENSED PRODUCTS.

B. With respect to HEPATITIS B:  
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(i) ORTHO shall pay AMGEN 5% of its NET SALES in the LICENSED TERRITORY of HEPATITIS B LICENSED PRODUCTS;

(ii) ORTHO shall retain for its own benefit 5% of its NET SALES in the LICENSED TERRITORY of HEPATITIS B LICENSED PRODUCTS;

- (iii) After the royalty payments set forth in (i) and (ii) above have been made, any remaining GROSS AMOUNTS received from the sale of HEPATITIS B LICENSED PRODUCTS shall be retained by ORTHO and applied in sequence as follows:
- (a) the equivalent of up to 100% of the HEPATITIS B royalty payments made by ORTHO to AMGEN under paragraph 5.01 of the TECHNOLOGY LICENSE AGREEMENT, provided that no more than 10% of said total payments shall be recoverable by ORTHO in any one (1) calendar year.
  - (b) the equivalent of up to 100% of the HEPATITIS B research and development payments made by ORTHO to AMGEN under paragraph 3.02 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.
  - (c) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to

HEPATITIS B incurred by ORTHO in accordance with Article 4 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.

- (iv) After the recovery payments in (iii) (b) and (iii) (c) above have been fully satisfied for costs incurred prior to NDA approval in the United States, costs of studies ongoing at the time of said approval and costs of studies requested by the FDA at the time of said approval, the royalty payments in (i) or (ii) above shall cease and before any royalty payments based on further sales are made to AMGEN, ORTHO shall retain its appropriate payment as set forth in (iii) (a) and then ORTHO shall pay to AMGEN a royalty payment equal to one-third (1/3rd) of the NET PRE-TAX AMOUNT resulting from the sales in United States of HEPATITIS B LICENSED PRODUCTS and a royalty of ten percent (10%) of NET SALES of HEPATITIS B LICENSED PRODUCTS in the remainder of the LICENSED TERRITORY.

(v) After the payments in (iv) above have been made, ORTHO shall retain two-thirds (2/3rds) of the NET PRE-TAX AMOUNT resulting from sales in the United State of HEPATITIS B LICENSED PRODUCTS and shall retain the total remainder of the monies received as a result of the NET SALES of HEPATITIS B LICENSED PRODUCTS in the remainder of the LICENSED TERRITORY.

C. With respect to IL-2:

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- (i) ORTHO shall pay AMGEN 5% of its NET SALES in the LICENSED TERRITORY of IL-2 LICENSED PRODUCTS;
  - (ii) ORTHO shall retain for its own benefit 5% of its NET SALES in the LICENSED TERRITORY of IL-2 LICENSED PRODUCTS;
  - (iii) After the royalty payments set forth in (i) and (ii) above have been made, any remaining GROSS AMOUNTS received from the sale of IL-2 LICENSED PRODUCTS shall be retained by ORTHO and applied in sequence as follows:

- (a) the equivalent of up to 100% of the IL-2 royalty payments made by ORTHO to AMGEN under paragraph 5.01 of the TECHNOLOGY LICENSE AGREEMENT, provided that no more than 10% of said total payments shall be recoverable by ORTHO in any one (1) calendar year.
  - (b) the equivalent of up to 100% of the IL-2 research and development payments made by ORTHO to AMGEN under paragraph 3.02 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.
  - (c) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to IL-2 incurred by ORTHO in accordance with Article 4 of the TECHNOLOGY LICENSE AGREEMENT or continued under this AGREEMENT.
- (iv) After the recovery payments in (iii) (b) and (iii) (c) above have been fully satisfied for costs incurred prior to NDA approval in the

United States, costs of studies ongoing at the time of said approval and costs of studies requested by the FDA at the time of said approval, the royalty payments in (i) or (ii) above shall cease and before any royalty payments based on further sales are made to AMGEN, ORTHO shall retain its appropriate payment as set forth in (iii) (a) and then ORTHO shall pay to AMGEN a royalty payment equal to one-third (1/3rd) of the NET PRE-TAX AMOUNT resulting from the sales in United States of IL-2 LICENSED PRODUCTS and a royalty of ten percent (10%) of NET SALES of IL-2 LICENSED PRODUCTS in the remainder of the LICENSED TERRITORY.

- (v) After the payments in (iv) above have been made, ORTHO shall retain two-thirds (2/3rds) of the NET PRE-TAX AMOUNT resulting from sales in the United State of IL-2 LICENSED PRODUCTS and shall retain the total remainder of the monies received as a result of the NET SALES of IL-2 LICENSED PRODUCTS in the remainder of the LICENSED TERRITORY.

#### 4.02 TIMING OF PAYMENTS

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For purposes of Paragraph 4.01, all computations of royalties and other payments due to AMGEN shall be made annually commencing on CLOSING and ending on December 31 of the year in which this AGREEMENT takes effect, and thereafter for each calendar year; provided, however, all royalty payments based on NET SALES due to AMGEN and ORTHO shall be payable within sixty (60) days of the end of each calendar quarter.

#### 4.03 ADJUSTMENTS

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ORTHO agrees that on the fifth anniversary of the EFFECTIVE DATE of this AGREEMENT and on each succeeding fifth anniversary date thereafter, it shall unilaterally, utilizing whatever records or documents it deems appropriate, review the royalty payments to AMGEN under Paragraph 4.01 B (iv) and 4.01 C (iv) of this Article 4 for sales of LICENSED PRODUCTS outside the United States. If ORTHO determines in good faith that said payments differ by more than 20% from 1/3 of the NET PRE-TAX AMOUNT, it shall propose an appropriate upward or downward adjustment in the royalty payments to AMGEN with the proviso that the royalty shall not be adjusted in excess of 25% from the then-existing royalty. If the parties cannot agree on the adjustment, it shall not be subject to the provisions of

Paragraph 10.07 of this AGREEMENT but shall remain at the then-existing royalty until the next scheduled review date.

#### 4.04 RECORDS

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ORTHO shall keep complete and accurate records of the latest three (3) years of NET SALES of LICENSED PRODUCTS with respect to which a royalty is payable according to this AGREEMENT. Within sixty (60) days following each quarterly period of a calendar year during which royalties are due under this AGREEMENT, ORTHO shall render to AMGEN a written report setting forth the amount of royalties due and payable on a country by country basis based on sales of such LICENSED PRODUCTS during such calendar quarter, and ORTHO shall, upon rendering such report, remit to AMGEN the amount of royalties shown thereby to be due.

#### 4.05 ACCOUNTING

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AMGEN shall have the right at its own expense to nominate an independent certified public accountant acceptable to and approved by ORTHO who shall have access to the records of ORTHO and those of its AFFILIATES and Sublicensees during reasonable business hours for the purpose of verifying the payments as provided for in this AGREEMENT, but this right may

not be exercised more than once in any one (1) calendar year, and said accountant shall disclose to AMGEN only information relating to the accuracy of the royalty report and the royalty payments made according to this AGREEMENT.

4.06 SALES TO AFFILIATES AND/OR SUBLICENSEES  
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No royalties shall be payable on sales of any LICENSED PRODUCT between ORTHO and any AFFILIATE or sublicensee.

4.07 PAYMENTS ON UNITED STATES SALES  
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Royalties on United States sales and all other payments to be made to AMGEN by ORTHO under this AGREEMENT shall be made in United States Dollars. Such payments shall be net of any taxes withheld pursuant to Paragraph 4.10 of this Article.

4.08 PAYMENTS ON SALES OUTSIDE THE UNITED STATES  
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Any payments due hereunder on sales outside the United States by ORTHO shall be payable to AMGEN in United States Dollars at the prevailing rate of exchange of the currency of the country in which the sales are made (as quoted by the CITIBANK N.A. of New York for the last business day of the calendar quarter for which the royalties are payable).

#### 4.09 AFFILIATE PAYMENTS

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In the event that ORTHO grants a sublicense under this AGREEMENT to any AFFILIATE, or AMGEN enters into a separate Agreement with any AFFILIATE pursuant to Article 2, such AFFILIATE shall make any payments to AMGEN in accordance with the provisions of this AGREEMENT in United States Dollars at the prevailing rate of exchange of the currency of the country of such AFFILIATE on the date on which the payment is due or in such other currency as both parties mutually agree upon.

#### 4.10 WITHHELD PAYMENT

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Any sum required under United States tax laws or the tax laws of any other country, to be withheld by ORTHO from payments for the account of AMGEN shall be promptly paid by ORTHO for and on behalf of AMGEN to the appropriate tax authorities, and ORTHO shall furnish AMGEN with official tax receipts or other appropriate evidence issued by the appropriate tax authorities sufficient to enable AMGEN to support a claim for income tax credit in respect of any sum so withheld. This same provision shall also apply to an AFFILIATE sublicensed under Article 2 hereof or entering into a separate agreement pursuant to said Article with relation to the tax laws of the

respective country or countries in which such AFFILIATE is doing business.

4.11 EXCHANGE RATE NOT ASCERTAINABLE  
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During any period in which no exchange rate between the foreign currency in question and the United States Dollar can be ascertained in accordance with this Article, AMGEN shall have the option of having payment of such royalties suspended with the proviso that payment of amounts due shall be made within thirty (30) days after such a rate of exchange is next quoted by CITIBANK N.A. of New York; provided always that AMGEN may at any earlier date elect to receive payment in the foreign currency in question or in any other currency for which an exchange rate can be ascertained. If the exchange rate can be ascertained, but the payment by ORTHO's AFFILIATE to AMGEN in United States Dollars or other currency is not permissible, ORTHO's AFFILIATE may satisfy its obligations to AMGEN by the deposit in the currency of the country where the sales of LICENSED PRODUCTS were made on which the payment was based to the credit and account of AMGEN in any commercial bank or trust company of its choice located in that country; prompt notice of which shall be given to AMGEN.

ARTICLE 5

SUPPLY AND MANUFACTURE

5.01 MANUFACTURE IN THE UNITED STATES

AMGEN agrees to manufacture and supply ORTHO's requirements of PRODUCTS for the sale of LICENSED PRODUCTS in the United States. The parties shall enter into an appropriate Manufacture and Supply Agreement covering the manufacture and supply of PRODUCTS. This agreement shall include provisions relating to price, supply of PRODUCTS and PRODUCT ORGANISMS, disclosure of manufacturing technology, preparation and delivery of specifications, record keeping, renegotiation terms, aid and assistance to ORTHO to set up its own manufacturing facility, either within the United States or outside the United States, if required, duration and the like. With respect to price, AMGEN will sell each of the PRODUCTS at its standard cost and ORTHO will not propose a price for any of the PRODUCTS less than its fully allocated cost of manufacture in its own facilities and said price shall be renegotiated triennially. Such agreement shall also provide that so long as a mutually acceptable price exists for any of the said PRODUCTS, AMGEN shall continue to supply all of ORTHO's requirements of said PRODUCT. This

Manufacture and Supply agreement shall be negotiated in an atmosphere of good faith and reasonableness.

5.02 ORTHO MANUFACTURING FACILITY  
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If AMGEN is unable to supply ORTHO's requirements of any of the PRODUCTS in the United States or if the parties are unable to negotiate a mutually acceptable price for AMGEN to supply ORTHO's requirements of any of the PRODUCTS in the United States, then ORTHO shall have the right to establish a facility for the manufacture of such PRODUCT or PRODUCTS for use and sale in the LICENSED TERRITORY.

5.03 MANUFACTURE OUTSIDE THE UNITED STATES  
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AMGEN and ORTHO will discuss a Manufacture and Supply Agreement for HEPATITIS B and IL-2 outside the United States and will endeavor to reach a mutual understanding on such an Agreement, provided however, that ORTHO shall have the right to manufacture all of its requirements of HEPATITIS B and IL-2 outside the United States for the sale of LICENSED PRODUCTS outside the United States as of the CLOSING, notwithstanding the provisions of Paragraph 1.04 of this AGREEMENT. AMGEN shall provide ORTHO, within six (6) months after CLOSING, and thereafter as appropriate, all manufacturing information and

other assistance sufficient for ORTHO to manufacture HEPATITIS B and IL-2 outside the United States if a Manufacture and Supply Agreement between the parties outside the United States is not in effect six (6) months after CLOSING. For IL-2, such manufacturing information and other assistance shall not be supplied prior to the payments in Paragraph 5.01 (iii) of the TECHNOLOGY LICENSE AGREEMENT.

5.04 AMGEN's ASSISTANCE

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If ORTHO desires to establish a manufacturing facility for the manufacture of PRODUCTS in accordance with Paragraph 5.02 or Paragraph 5.03 of this AGREEMENT or under an agreement between ORTHO and KIRIN-AMGEN designated "Technology License Agreement" dated September 30, 1985, AMGEN shall diligently assist ORTHO in the establishment and start-up of said manufacturing facility, including providing ORTHO with manufacturing information reasonably sufficient for ORTHO to manufacture PRODUCTS. ORTHO shall reimburse AMGEN at its then-effective monthly billing rate and any related out of pocket travel and lodging expenditures outside the United States for its efforts in assisting ORTHO in establishing said facility.

5.05 DELIVERY OF PRODUCT ORGANISMS  
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AMGEN hereby warrants and represents that it shall faithfully and diligently deliver to any manufacturing facility provided for in this Article 5 such quantities of PRODUCT ORGANISMS as are reasonably required by ORTHO, or its designated AFFILIATE, to manufacture LICENSED PRODUCTS. Such deliveries shall be made within thirty (30) days after written request by ORTHO to AMGEN at no expense to ORTHO, or its designated AFFILIATE, and shall be made by AMGEN from time to time during the term of this AGREEMENT as the need arises to replenish PRODUCT ORGANISMS.

ARTICLE 6  
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CONFIDENTIALITY  
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6.01 LIMITATIONS OF USAGE  
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All confidential information transmitted by either party to the other including all confidential information developed pursuant to this AGREEMENT, shall be identified with reference to this AGREEMENT and the receiving party shall, while this AGREEMENT is in effect and for three (3) years after termination thereof, make no use of this information other than in furtherance of this AGREEMENT and shall use the same efforts

to keep secret and prevent the disclosure of such information to parties other than its agents, officers, employees and representatives authorized to receive such information as it would its own confidential information except for such confidential information that,

(a) was known to the receiving party at the time of its disclosure and not previously subject to any obligation of confidentiality at the time of its disclosure;

(b) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(c) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this AGREEMENT; or

(d) became known to the receiving party after its disclosure (i) from a source other than the disclosing party (including from independent development by the receiving party), (ii) other than from a third party who had an obligation to the disclosing party not to disclose such information to others, and (iii) other than under an obligation of confidentiality.

Each receiving party may disclose any of the LICENSED KNOW-HOW and confidential information to the extent

such disclosure is necessary to comply with applicable laws or regulations, or to make and use LICENSED PRODUCTS in accordance with the terms of this AGREEMENT.

ARTICLE 7

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PATENTS

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7.01 PROSECUTION AND MAINTENANCE

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AMGEN agrees to faithfully continue, at its expense, the prosecution of all patent applications listed in Exhibit D within the LICENSED FIELD and, when necessary, to file and prosecute additional applications covering patentable technology relating to EPO, HEPATITIS B and IL-2 in the United States and other countries throughout the world. AMGEN shall have the duty and responsibility to pay all taxes and annuities on all applications and patents listed in Exhibit D within the LICENSED FIELD of the AGREEMENT. AMGEN shall provide ORTHO with copies of all applications listed in Exhibit D within the LICENSED FIELD, all future-filed applications and all correspondence with Patent Offices applicable thereto. If AMGEN chooses not to prosecute and maintain certain applications/patents under this AGREEMENT, AMGEN shall so notify ORTHO and ORTHO shall, in its sole discretion, decide whether to assume the responsibility and

expenses therefore for each such application or patent. In that event, the applications/patents for which ORTHO shall assume responsibility shall be assigned to ORTHO. If ORTHO so assumes responsibility, it shall be entitled to recover all its expenses (including attorneys' fees) from the sale of LICENSED PRODUCTS in the country prior to any payments under Article 4 of this AGREEMENT.

#### 7.02 REVIEW

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AMGEN shall give ORTHO the opportunity to review, through their patent counsel, the status of all pending patent applications listed in Exhibit D and shall keep ORTHO informed of the status of their prosecution, including such Patent Office proceedings as interferences, reexamination, oppositions and requests for patent term extension under the Act. Notwithstanding the above, AMGEN shall have sole responsibility for all decisions in connection with the filing and prosecution of all patent applications and the maintenance of all patents. AMGEN shall take all appropriate actions to maximize the benefits for both AMGEN and ORTHO with respect to any patent term restoration and/or regulatory exclusivity that may be available in connection with any LICENSED PATENT or LICENSED PRODUCT.

ARTICLE 8

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ENFORCEMENT  
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8.01 INFRINGEMENT BY ORTHO  
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(i) If, as a result of the manufacture, use and sale of LICENSED PRODUCTS, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action by a third party, then ORTHO shall actively consult with AMGEN in its attempts to resolve same. If the settlement of a lawsuit or threatened lawsuit or other action requires any payments to a third party, then ORTHO and AMGEN shall share said payments on an equal basis.

(ii) If, as a result of the manufacture, use and sale of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action and as a result of same ORTHO is prevented from the commencement of marketing said LICENSED PRODUCT, then provided that one or more other LICENSED PRODUCTS are being marketed or in the future are marketed or said LICENSED PRODUCT is being marketed in another country or in the future is marketed, ORTHO shall be entitled to recover the following in the manner provided in Paragraph 4.01 hereof from the sale of any LICENSED PRODUCT:

(a) the equivalent of up to 100% of the research and development payments made by ORTHO to AMGEN under Paragraph 3.02 of the TECHNOLOGY LICENSE AGREEMENT for said LICENSED PRODUCT; and (b) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with ARTICLE 4 of the TECHNOLOGY LICENSE AGREEMENT

(iii) If, as a result of the manufacture, use and sale of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action in any country, and as a result of same, ORTHO is prevented from further marketing said PRODUCT in said country then if

(A) said PRODUCT has been on sale less than three (3) years in said country and provided that one or more other LICENSED PRODUCTS are being marketed in any country or in the future are marketed or said LICENSED PRODUCT is being marketed in another country or in the future is marketed, ORTHO shall be entitled to recover the following in the manner provided in Paragraph

4.01 hereof from the sale of any LICENSED PRODUCTS:

- (a) the equivalent of up to 100% of the research and development payments made by ORTHO to AMGEN under paragraph 3.02 of the TECHNOLOGY LICENSE AGREEMENT and this AGREEMENT for said LICENSED PRODUCT; and
- (b) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with ARTICLE 4 of the TECHNOLOGY LICENSE AGREEMENT and this AGREEMENT.

(B) said PRODUCT has been on sale more than three (3) years in said country, there shall be no recovery by ORTHO under this Paragraph 8.01 from AMGEN.

(iv) In connection with any lawsuit or threatened lawsuit or other action as set forth in (i), (ii) or (iii) above, ORTHO and AMGEN shall share on an equal basis all reasonable expenses (including attorneys' fees) incurred therewith.

## 8.02 INFRINGEMENT BY THIRD PARTIES

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Either party shall promptly notify the other party of any infringement of any LICENSED PATENTS; misappropriation of a trade secret or declaration of an interference proceeding relating to LICENSED PATENTS or LICENSED KNOW-HOW, and shall provide the other party with all available evidence relating thereto. AMGEN and ORTHO shall then consult with each other as to the best manner in which to proceed. AMGEN shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If AMGEN requests ORTHO to join AMGEN in such suit or action and ORTHO agrees to do so, ORTHO shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. AMGEN shall pay ORTHO its reasonable expenses (including its attorney's fees) in connection with any such suit or action. Should AMGEN lack standing to bring any such action, then AMGEN may cause ORTHO to do so upon first undertaking to indemnify and hold ORTHO harmless (to the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expense (including attorney fees) stemming therefrom. In the event AMGEN fails to take action with respect to such matters within a reasonable period, not more than six (6) months, following receipt of such notice

and evidence, ORTHO shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If ORTHO finds it necessary to join AMGEN in such suit or action, AMGEN shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. ORTHO shall pay to AMGEN the reasonable expenses of AMGEN (including its attorney's fees) in connection with any such suit or action. Absent an agreement between the parties to jointly bring any action or suit hereunder and share the expenses thereof, any amount recovered in any such action or suit shall be retained by the party bearing its expenses thereof.

ARTICLE 9  
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TERM AND TERMINATION  
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9.01 TERM  
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This AGREEMENT shall come into effect on the EFFECTIVE DATE and shall remain in effect unless the parties mutually agree in writing to terminate, or until termination occurs pursuant to paragraph 9.02 below.

9.02 DEFAULT

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In the event that AMGEN or ORTHO (the "Defaulting party") shall:

a) default in a material obligation hereunder, including failure to make any payments, and fail to remedy such default within 60 days after notice of such default by the Non-Defaulting party; or

b) become bankrupt or insolvent, or file a petition in bankruptcy or make a general assignment for the benefit of creditors or otherwise acknowledge insolvency or be adjudged bankrupt; or

c) go or be placed in a process of complete liquidation other than for an amalgamation or reconstruction; or

d) suffer the appointment of a receiver for any substantial portion of its business who shall not be discharged within 60 days after such receiver's appointment, then, and in any such event, the Non-Defaulting party, at its option, may terminate its obligations to, and the rights of, the Defaulting party under the license granted in this AGREEMENT upon 30 days written notice to the Defaulting party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

9.03 ORTHO'S RIGHTS UPON DEFAULT

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Upon termination of this AGREEMENT as a result of AMGEN's default under Paragraph 9.02, ORTHO shall have the right, but not the obligation, to make, use and sell LICENSED PRODUCTS under LICENSED PATENTS and LICENSED KNOW-HOW, and all of ORTHO's payment obligations under this AGREEMENT shall continue, provided however, that ORTHO shall have the right to off-set against any such payments any and all expenses incurred as a result of AMGEN's default.

9.04 SURVIVAL

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Notwithstanding the termination of a party's obligations to or the rights of the Defaulting party under this Agreement in accordance with the provisions of Paragraph 9.02, the provisions of Article 6 shall survive such termination and continue in full force and effect for a period of not more than three (3) years following termination.

9.05 EFFECT OF TERMINATION

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Nothing herein shall limit any remedies available to either party at law or in equity for the default of the other party under Paragraph 9.02 (b), (c) or (d). Termination shall

not excuse the obligation of either party to pay money due to the other party.

ARTICLE 10

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MISCELLANEOUS PROVISIONS

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10.01 NO INFRINGEMENT

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AMGEN is not aware of (i) any third party rights upon which, in its opinion, this AGREEMENT will infringe, or (ii) any claimed infringement against AMGEN with respect to LICENSED PRODUCTS.

10.02 EFFORTS

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The parties hereto shall use reasonable and practical efforts to obtain any and all consents, approvals, orders or authorizations required to be obtained with respect to the provisions hereof.

10.03 NOTICES

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All notices, requests, demands and other communications required or permitted to be given under this AGREEMENT shall be in writing and shall be mailed to the party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return receipt requested, postage

prepaid, and properly addressed as follows (in which case such notice shall be deemed to have been duly given on the third (3rd) day following the date of such sending):

AMGEN  
-----

Amgen  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320-1789  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

with a copy to:

Cooley, Godward, Castro,  
Huddleson & Tatum  
5 Palo Alto Square, Suite 400  
Palo Alto, CA 94306  
U.S.A.  
Telex No. 910-372-7370 COOLEY SFO  
380816 COOLEY PA EASYLINK  
Attn: Alan C. Mendelson, Esq.

ORTHO  
-----

President  
Ortho Pharmaceutical Corporation  
U.S. Route 202  
Raritan, New Jersey 08869  
U.S.A.

with a copy to:

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, N.J. 08933-7033  
U.S.A.  
Telex No. 844-481  
Attn: General Counsel

Any party by giving notice to the other in the manner provided above may change such party's address for purposes of this Paragraph 10.03.

10.04 ENTIRE AGREEMENT; AMENDMENT  
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This AGREEMENT (together with all Exhibits attached hereto) constitutes the full and complete agreement and understanding between the parties hereto and shall supersede any and all prior written and oral agreements including but not limited to any "Agreement in Principle" concerning the subject matter contained herein. This AGREEMENT may not be modified or amended nor may any provision hereof be waived without a written instrument executed by AMGEN and ORTHO.

10.05 WAIVER  
-----

No failure or delay by any party to insist upon the strict performance of any term, condition, covenant or agreement of this AGREEMENT, or to exercise any right, power or remedy hereunder or consequent upon a breach hereof shall constitute a waiver of any such term, condition, covenant, agreement, right, power or remedy or of any such breach or preclude such party from exercising any such right, power or remedy at any later time or times.

10.06 HEADINGS  
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Headings in this AGREEMENT are included herein for the convenience of reference only and shall not constitute a part of this AGREEMENT for any purpose.

10.07 ARBITRATION AND ATTORNEYS' FEES AND COSTS  
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In the event any dispute should arise between the parties hereto as to the validity, construction, enforceability or performance of this AGREEMENT or any of its provisions, such dispute shall be settled by arbitration. Said arbitration shall be conducted at Chicago, Illinois, in accordance with the rules then obtaining of the American Arbitration Association with a panel of three (3) arbitrators. The rules of discovery then pertaining to the courts of law in such jurisdiction shall apply thereto. The unsuccessful party to such arbitration shall pay to the successful party all costs and expenses, including reasonable attorneys' fees incurred therein by such successful party.

10.08 GOVERNING LAW  
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This AGREEMENT shall be construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in that state.

10.09 BINDING EFFECT  
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This AGREEMENT shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns.

10.10 NUMBER AND GENDER  
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Words in the singular shall include the plural, and words in a particular gender shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.11 COUNTERPARTS  
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This AGREEMENT may be executed in one or more counterparts by the parties hereto. All counterparts shall be construed together and shall constitute one AGREEMENT.

10.12 AGREEMENT TO PERFORM NECESSARY ACTS  
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Each party agrees to perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary or desirable to carry out the provisions of this AGREEMENT.

10.13 VALIDITY

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If for any reason any clause or provision of this AGREEMENT, or the application of any such clause or provision in a particular context or to a particular situation, circumstance or person, should be held unenforceable, invalid or in violation of law by any court or other tribunal, then the application of such clause or provision in contexts or to situations, circumstances or persons other than that in or to which it is held unenforceable, invalid or in violation of law shall not be affected thereby, and the remaining clauses and provisions hereof shall nevertheless remain in full force and effect, provided however, that any provisions so held unenforceable, invalid or in violation of law shall be rewritten by the parties in a lawful manner to reflect its intent.

10.14 REPRESENTATIONS

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Each of the party hereto acknowledges and agrees (i) that no representation or promise not expressly contained in this AGREEMENT has been made by the other party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this AGREEMENT is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this AGREEMENT; and (iii) that

each party has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this AGREEMENT.

10.15 ASSIGNMENT  
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Neither party shall assign its rights or obligations under this AGREEMENT without prior written consent of the other party, provided however, ORTHO may assign its rights and obligations by sublicensing its AFFILIATES or third parties as provided in Paragraph 2.02 hereinabove.

10.16 INDEPENDENT CONTRACTORS  
-----

AMGEN and ORTHO shall not be deemed to be partners, joint venturers or each other's agents, and neither shall have the right to act on behalf of the other except as expressly provided hereunder or otherwise expressly agreed to in writing.

10.17 FORCE MAJEURE  
-----

Neither party shall be liable for failure to perform as required by any provision of this AGREEMENT where such failure results from a force majeure beyond such party's control. In the event of any delay attributable to a force majeure, the time for performance affected thereby shall be extended for a period equal to the time lost by reason of the

delay. If, as a result of a force majeure, AMGEN is unable to manufacture LICENSED PRODUCTS, for the purposes of this AGREEMENT, then, ORTHO shall have the right, but not the obligation, to manufacture said LICENSED PRODUCTS and AMGEN shall provide ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such LICENSED PRODUCTS.

10.18 INDEMNITY  
-----

Each party to this AGREEMENT shall be responsible for its own acts relating to the manufacture and use of LICENSED PRODUCTS and neither shall indemnify the other for costs, expenses, liability, damages and claims for any injury or death to persons or damage to or destruction of property or other loss arising out of or in connection with any LICENSED PRODUCTS made or used by either party .

10.19 PUBLICITY AND DISCLOSURE  
-----

In the absence of specific agreement between the parties, neither party shall originate any publicity, news release or other public announcement, written or oral, whether to the public press, to stockholders or otherwise, relating to this AGREEMENT, to any amendment hereto as to performance hereunder, save only such announcement as in the opinion of legal counsel to the party making such announcement is required

by law or practice to be made. The party making any such announcement shall give the other party an opportunity to review the form of the announcement before it is made. Routine references to this AGREEMENT and the arrangements hereunder without undue frequency and without emphasis shall be allowed in the usual course of business provided that notice of such use is given to the other party. If, in the opinion of ORTHO, excessive use occurs, such references shall be discontinued after discussion among the parties.

10.20 COSTS AND EXPENSES  
-----

AMGEN and ORTHO shall each bear and pay for their respective costs and expenses regarding the negotiation and preparation of this AGREEMENT and all documents, instruments and agreements related thereto.

10.21 EXPORT CONTROL LAWS  
-----

10.21.1 The parties hereby agree that any Technical Data (as that term is defined in Section 379.1 of the U.S. Export Administration Regulations) exported from the United States pursuant to this AGREEMENT and any other related agreements, and any direct product thereof, shall not be shipped, either directly or indirectly, to Afghanistan or any Group P, Q, S, W, Y or Z Countries (as specified in Supplement

No. 1 to part 370 of the Export Administration Regulations), unless (i) separate specific authorization to reexport such Technical Data or such direct products is provided by the U.S. Office of Export Administration or (ii) such specific authorization is not required pursuant to part 379.8 of the U.S. Export Administration Regulations. The parties further agree that the export and reexport of commodities pursuant to this AGREEMENT and any other related agreements shall be subject to the licensing requirements of the U.S. Export Regulations.

10.21.2 In the event that a specific authorization of, or a validated license from, a government other than that of the exporting party is required, AMGEN and ORTHO each agree that the party within the jurisdiction of such other government shall, upon the request of the party proposing to make the export, use reasonable efforts to obtain, as expeditiously as applicable, the requisite authorization or license.

10.22 PATENT MARKING  
-----

ORTHO shall mark or cause to be marked all LICENSED PRODUCTS sold under this AGREEMENT, in accordance with any applicable laws and regulations.

IN WITNESS WHEREOF, the undersigned have caused this AGREEMENT to be executed by their duly authorized

representatives in the manner legally binding upon them on the first date written above.

AMGEN  
a California corporation

/s/ Robert D. Weist  
-----  
Witness

By /s/ George B. Rathmann  
-----  
George B. Rathmann, President

ORTHO PHARMACEUTICAL CORPORATION  
a New Jersey corporation

/s/ Dennis N. Longstreet  
-----  
Witness

By /s/ Gary V. Parlin  
-----  
Gary V. Parlin, President



EXHIBIT B

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DESCRIPTION OF HEPATITIS B

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The chemical structure of recombinant yeast-derived hepatitis B surface antigen is best described by its amino acid sequence which is depicted below:

NH\2\\-Met      glu asn ile thr ser gly phe leu gly pro leu leu val leu gln  
ala gly phe phe leu leu thr arg ile leu thr ile pro gln ser  
leu asp ser trp trp thr ser leu asn phe leu gly gly ser pro  
val cys leu gly gln asn ser gln ser pro thr ser asn his ser  
pro thr ser cys pro pro ile cys pro gly tyr arg trp met cys  
leu arg arg phe ile ile phe leu phe ile leu leu leu cys leu  
ile phe leu leu val leu leu asp tyr gln gly met leu pro val  
cys pro leu ile pro gly ser thr thr thr ser thr gly pro cys  
lys thr cys thr thr pro ala gln gly asn ser met phe pro ser  
cys cys cys thr lys pro thr asp gly asn cys thr cys ile pro  
ile pro ser ser trp ala phe ala lys tyr leu trp gly trp ala  
ser val arg phe ser trp leu ser leu leu val pro phe val gln  
trp phe val gly leu ser pro thr val trp leu ser ala ile trp  
met met trp tyr trp gly pro ser leu tyr ser ile val ser pro  
phe ile pro leu leu pro ile phe phe cys leu trp val tyr ile  
COOH



## Exhibit D-1

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## ERYTHROPOIETIN

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
155	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	561,024	12/13/83
155-CIP-1	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	582,185	2/21/84
155-CIP-2	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	655,841	9/28/84
155-CIP-3	F. Lin	Production of Erythropoietin	U.S.	675,298	11/30/84
132	J. Egrie	ATCC HB8209 - Its Monoclonal Antibody to Erythropoietin ATCC HB8209/Budapest	U.S.	463,724	2/4/83
190	P. Lai T. Strickland	Protein Purification	U.S.	747,119	6/20/85

Exhibit D-2

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HEPATITIS B

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
106-C	G. Bitter	Expression of Exogenous Polypeptides and Polypeptide Products Including Hepatitis B Surface Antigen in Yeast	U.S.	748,712 (A continuation of S.N. 412,707 filed 8/30/82)	6/26/85
204	J. Fieschko	Fermentation Methods for Hepatitis Vaccine Production	U.S.	*	8/15/85
201	H. Levine	Lysis Method and Buffer for Extraction of HBSAg from Yeast Cells	U.S.	*	8/15/85

\*Information not yet available

Exhibit D-3

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INTERLEUKIN II

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
138	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	521,967	8/10/83
138-CIP-1	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	635,941	8/3/84
			Canada	460,745	8/10/84
			Israel	72643	8/10/84
			Japan	Via PCT US84/01252	8/9/84
		EPO	designating	84.109537.5	8/10/84
			Austria		
			Belgium		
			France		
			Germany		
			Italy		
			Luxembourg		
			Netherlands		
			Sweden		
			Switzerland		
			Liechtenstein		
			United Kingdom		
- -CIP-2	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	717,334	3/29/85

9-30-85

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TECHNOLOGY LICENSE AGREEMENT

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THIS TECHNOLOGY LICENSE AGREEMENT entered into this 30th day of September, 1985, by and between AMGEN, a California corporation having offices at 1900 Oak Terrace Lane, Thousand Oaks, California 91320-1789 (said corporation hereinafter referred to as "AMGEN") and ORTHO PHARMACEUTICAL CORPORATION, a New Jersey corporation having offices at U.S. Route 202, Raritan, New Jersey 08869, (said corporation hereinafter referred to as "ORTHO").

WITNESSETH:

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WHEREAS, AMGEN represents that it has developed and is continuing to develop technology relating to certain genetically-engineered health-care products and processes for their manufacture;

WHEREAS, AMGEN further represents that it is the owner of patent applications by assignment and unpatented know-how covering said genetically-engineered health-care products;

WHEREAS, ORTHO and AFFILIATES are engaged in the research, development and sale of health care products throughout the world and wish to obtain certain rights to such technology and to such patents and patent applications;

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein recited, and other good and valuable considerations, the receipt of which is acknowledged, it is agreed as follows:

ARTICLE 1

-----  
DEFINITIONS  
-----

For the purposes of this Agreement, the terms set forth in this Article I shall have the following meanings:

1.01 "ACT" shall mean the Drug Price Competition and Patent Term Restoration Act of 1984 and equivalent subsequent legislation in the United States and in any foreign country.

1.02 "AFFILIATE" shall mean and include (i) any company which owns or controls directly or indirectly at least forty percent (40%) of the voting stock of ORTHO and (ii) any other company at least forty percent (40%) of whose voting stock is

owned or controlled directly or indirectly by such owning or controlling company, and (iii) any other company with which ORTHO or such an owning, owned, controlling or controlled company has a co-marketing, joint venture or distribution agreement for pharmaceuticals outside the United States. The term "ORTHO" shall also mean and include any AFFILIATE wherein the inclusion of same shall be warranted under the provisions of the AGREEMENT.

1.03 "AGREEMENT" shall mean this Technology License Agreement.

1.04 "CLINICAL EFFICACY" shall mean the following with respect to each of EPO, HEPATITIS B AND IL-2:

PRODUCT	CLINICAL EFFICACY
-----	-----
EPO	A statistically significant increase in hematocrit in patients with anemia secondary to compromised renal function, including patients on dialysis.

HEPATITIS B

Seroconversion (anti HBs Ag- to + in normal adults) in incidence and titer comparable to existing Hepatitis B vaccine.

IL-2

Laboratory evidence in terms of increased lymphocytes or killer cell activity plus clinical and statistical evidence of favorable activity in at least one placebo controlled study.

1.05 "CLOSING" shall occur when, :

(a) AMGEN shall execute and deliver to ORTHO this AGREEMENT and a Product License Agreement to market LICENSED PRODUCTS;

(b) ORTHO shall execute and deliver to AMGEN this AGREEMENT and the Product License Agreement and shall further deliver, as provided in paragraph 5.01(i), to AMGEN the amount

of \$4,000,000 in the form of a certified or cashier's check, representing the aggregate initial royalty payments;

(c) ORTHO shall deliver to AMGEN the amount of any royalty payments under Paragraph 5.01 (ii) hereinafter earned by AMGEN on account of any IND approvals regarding the PRODUCTS received prior to the CLOSING; such amount to be paid in the form of a certified or cashier's check;

(d) The following approvals shall have been obtained: (i) the Executive Committee or the Board of Directors of AMGEN shall have authorized AMGEN's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and a Product License Agreement; and (ii) the Board of Directors of ORTHO shall authorize ORTHO's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and a Product License Agreement.

1.06 "EFFECTIVE DATE" shall mean the date on which this AGREEMENT takes effect which is the date first written above.

1.07 "EPO" shall mean the erythropoietin as described in Exhibit A.

1.08 "FIELD OF ACTIVITY" shall mean the areas of research, development, and regulatory approval of the PRODUCTS for all human uses, except diagnostics and in the case of EPO, dialysis, and shall include but not be limited to, toxicology, dosage studies, model studies, clinical studies, product registration and government approvals.

1.09 "FDA" shall mean the United States Food & Drug Administration and foreign counterparts thereof.

1.10 "HEPATITIS B" shall mean the recombinant yeast-derived hepatitis B surface antigen vaccine as described in Exhibit B and any other hepatitis B vaccine development resulting from the Development Program hereunder or a supplement of said Program.

1.11 "IL-2" shall mean the recombinant-methionyl human interleukin 2[alanine 125] as described in Exhibit C.

1.12 "IND" shall mean a Notice of Claimed Investigational Exemption for a New Drug and all supplements under the United States Food, Drug & Cosmetic Act (FDA Act) and foreign counterparts thereof for the LICENSED PRODUCTS.

1.13 "LICENSED FIELD" shall mean and include:

(a) with respect to EPO: all indications for human use except dialysis and diagnostics;

(b) with respect to HEPATITIS B and IL-2: all indications for human use except diagnostics.

1.14 "LICENSED KNOW-HOW" shall mean and include any and all data, information, technology or special ability on the part of AMGEN including, but not limited to, processes, techniques, methods, products, materials and compositions relating to the research, development, manufacture, testing or use of EPO, HEPATITIS B and IL-2, now owned or controlled by AMGEN or that shall be owned or controlled by AMGEN during the term of this AGREEMENT, which is reasonably related to LICENSED PATENTS and LICENSED PRODUCTS for use in the LICENSED FIELD; and which is useful in seeking approval from appropriate governmental health authorities to market LICENSED PRODUCTS and which includes AMGEN's INDs and NDAs and all supplements thereto covering PRODUCTS in the LICENSED FIELD.

1.15 "LICENSED PATENTS" shall mean:

(a) any patent listed in Exhibit D;

(b) any patent application listed in Exhibit D, and any division, continuation, or continuation-in-part of any such

application, and any patent which shall issue based on such application, division, continuation or continuation-in-part;

(c) any patent which is a reissue or extension of or a patent of addition to, any patent defined in (a) or any application maturing into a patent defined in (b) above;

(d) any patent application or patent corresponding to any patent application or patent identified in (a), (b) or (c) above which is hereafter filed or issued in any country; and

(e) any patent application related to or based on any of AMGEN's technical information developed in the LICENSED FIELD during the performance of this AGREEMENT, and any division, continuation or continuation-in-part of any such application; and any patent which shall issue based on such application, division, continuation or continuation-in-part; and any patent which is a reissue or extension of, or a patent of addition to, any such patent.

1.16 "LICENSED PRODUCTS" shall mean and include any PRODUCTS for use in the LICENSED FIELD (i) which are within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (ii) whose use is within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iii) which are manufactured or packaged within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iv) which utilize any LICENSED KNOW-HOW.

1.17 "LICENSED TERRITORY" shall mean and include:

- (a) with respect to EPO: the United States, its territories and possessions, including the Commonwealth of Puerto Rico;
- (b) with respect to HEPATITIS B: the entire world except China;
- (c) with respect to IL-2: the entire world.

1.18 "MAJOR COUNTRY" shall mean any of the following: United States, United Kingdom, West Germany, France and Japan.

1.19 "NDA" shall mean a New Drug Application and/or a Product License Application and all supplements filed pursuant to the requirements of the FDA, including all documents, data and other information concerning LICENSED PRODUCTS which are necessary for, or included in, FDA approval to market LICENSED PRODUCTS and foreign counterparts thereof of NDAs.

1.20 "OUTSIDE RESEARCH PAYMENTS" shall mean amounts paid by ORTHO for clinical testing to an individual or individuals or to an entity other than AMGEN or ORTHO or an AFFILIATE for purposes of independent evaluation of any of the PRODUCTS, which

data shall be used by ORTHO and/or AMGEN in filing NDAs or other registrations regarding the PRODUCTS.

1.21 "PHASE I" shall mean that portion of the NDA approval process which provides for the first introduction into man (when only animal and in vitro data are available) of a LICENSED PRODUCT with the purpose of determining human toxicity, metabolism, absorption, elimination and other pharmacological action, preferred routes of administration and safe dosage range.

1.22 "PHASE II" shall mean that portion of the NDA approval process which provides for the initial trials of a LICENSED PRODUCT on a limited number of patients for specific disease control or prophylaxis purposes. PHASES I and II may overlap and, when indicated, may require additional animal data before they can be completed. Such animal tests are required to be designed to take into account the expected duration of administration of LICENSED PRODUCTS to human beings, the age groups, and physical status.

1.23 "PRODUCTS" shall mean IL-2, HEPATITIS B, and EPO for all human uses in the LICENSED FIELD. Wherever a reference is made to the "PRODUCT" or to the "PRODUCTS", the reference shall

apply to each of IL-2, HEPATITIS B and EPO severally, unless the context shall indicate otherwise. Whenever the provisions of this AGREEMENT differ in application to any of IL-2, HEPATITIS B or EPO, then such product shall be identified separately, rather than being referred to as a "PRODUCT".

1.24 "PRODUCT ORGANISMS" shall mean and include any and all organisms developed or acquired by AMGEN, the uses of which are licensed to ORTHO pursuant to this AGREEMENT and which have been genetically engineered to produce biologically active LICENSED PRODUCTS, including any and all improvements thereon.

1.25 "VALID LICENSED CLAIM" shall mean and include a claim in an issued LICENSED PATENT which has not lapsed or become abandoned and which claim has not been declared invalid by an unreversed or unappealable decision or judgment of a court of competent jurisdiction.

ARTICLE 2

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LICENSE

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2.01 GRANT

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(a) AMGEN hereby grants to ORTHO but not AFFILIATES, except as hereinafter provided, an exclusive license to make in

one location, have made, and use LICENSED KNOW-HOW, LICENSED PATENTS and LICENSED PRODUCTS in the LICENSED TERRITORY in the LICENSED FIELD for use in research and in the development and regulatory approval of LICENSED PRODUCTS.

(b) AMGEN, having received the consent of Kirin Brewery Co., Ltd., hereby grants to ORTHO but not AFFILIATES, an exclusive license, except as against AMGEN's rights under this AGREEMENT in the LICENSED TERRITORY, to make EPO in one location in the United States, for use and sale outside the LICENSED TERRITORY but not including China and Japan. AMGEN shall provide to ORTHO all information and any assistance and know-how required for ORTHO to achieve the purposes of this paragraph at the earlier of the demonstration of CLINICAL EFFICACY of EPO or the completion of PHASE II studies as set forth in an agreement between ORTHO and KIRIN-AMGEN designated "Technology License Agreement" dated September 30, 1985.

2.02 SUBLICENSER  
-----

ORTHO may, with prior written notice to AMGEN, sublicense LICENSED PATENTS, LICENSED KNOW-HOW and LICENSED PRODUCTS under this AGREEMENT (i) to any AFFILIATE or third party, to use LICENSED PRODUCTS as provided in this AGREEMENT; and (ii) to any one controlled AFFILIATE to make in one location and use LICENSED PRODUCTS as provided in this AGREEMENT. If

ORTHO requests the right to sublicense one additional controlled AFFILIATE to make in one location and use LICENSED PRODUCTS as provided in this AGREEMENT, AMGEN shall not unreasonably withhold its consent thereto.

2.03 ASSURANCE BY ORTHO  
-----

In the event of sublicensing as in Paragraph 2.02, ORTHO shall assure AMGEN that this AGREEMENT shall apply to such AFFILIATE or third party sublicensee, and such AFFILIATE or third party sublicensee shall deliver to AMGEN a written promise to comply with the terms of this AGREEMENT to the extent that such terms are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities under this AGREEMENT as applied to such AFFILIATE or third party sublicensee.

2.04 DIRECT AGREEMENT  
-----

As a substitute for a sublicense, AMGEN shall, if ORTHO so requests, enter into a separate agreement with any AFFILIATE of ORTHO granting a license in accordance with the provisions of this AGREEMENT. Such agreement shall incorporate all of the terms of this AGREEMENT to the extent that they are applicable. ORTHO shall guarantee the due and punctual

performance of any and all responsibilities by the AFFILIATE under such separate agreement.

2.05 WARRANTY  
-----

AMGEN warrants and represents that it has the full right and power to grant the license set forth in Paragraph 2.01 of this Article 2 and that there are no outstanding agreements, assignments or encumbrances in existence inconsistent with the provisions of this AGREEMENT including, without limitation as to generality, any obligations to governmental agencies or private foundations resulting from acceptance of research grant monies, or otherwise.

ARTICLE 3  
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RESEARCH & DEVELOPMENT ACTIVITY  
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3.01 DEVELOPMENT PROGRAM.  
-----

AMGEN and ORTHO hereby agree to conduct a Development Program, as set forth below.

(a) AMGEN and ORTHO shall meet promptly, after execution of the AGREEMENT, to formulate an outline within thirty (30) days after execution of this AGREEMENT of research and development activities which shall be conducted by AMGEN until the formulation of a Development Plan. Within ninety (90)

days after execution of this AGREEMENT, the parties shall establish a detailed development plan for the Development Program ("Development Plan"). The Development Plan shall: (i) identify the technical problems involved and the general projects to be carried out regarding the PRODUCTS, (ii) estimate the personnel to be contributed by AMGEN and ORTHO for each project, and (iii) set forth a projected timetable for the work, including clinical testing, to be performed by AMGEN and ORTHO. The Development Plan shall include a General Outline of both PHASE I and PHASE II, identifying the investigator or investigators, the hospitals or research facilities where the clinical pharmacology will be undertaken, any expert committees or panels to be utilized, the maximum number of subjects to be involved, and the estimated duration of these early phases of investigation, AMGEN and ORTHO shall diligently conduct the projects set forth in the Development Plan and shall use reasonable efforts to reach the goals of the Development Program in their conduct of those projects. The parties shall prepare and supply to each other written reports of their respective progress under the Development Plan every three (3) months. The parties shall make appropriate revisions, if any, to the Development Plan every three (3) months.

(b) If any party desires, at any time, to modify the Development Plan, it shall notify the other party of the

modification. Routine-type or minor modifications to the Development Plan may be accomplished by communicating same to the other party. Any major modification or amendment to the Development Plan shall be considered by both parties in good faith and be mutually agreed upon.

3.02 COMPENSATION.

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(a) ORTHO shall pay monthly to AMGEN an amount calculated on the basis of the number of Scientists used by AMGEN in the Development Program at AMGEN's then-effective monthly billing rate per Scientist, which is \$12,677 as of the date hereof. The monthly billing rate per scientist in this paragraph may be adjusted on an annual basis to reflect any changes in the actual monthly billing rate not to exceed the United States Consumer Price Index (CPI) for the previous calendar year. For purposes of this AGREEMENT, the term "Scientist" includes research scientists and research associates but excludes laboratory assistants. For HEPATITIS B, AMGEN will provide the research equivalent of sixteen (16) Scientist-years during the initial twenty-four (24) months of this AGREEMENT. For IL-2, AMGEN will provide the research equivalent of eight (8) Scientist-years during the initial twenty-four (24) months of this AGREEMENT. For EPO, upon reasonable notice and request by ORTHO, AMGEN will assign a

reasonable number of Scientists for whose work AMGEN shall be reimbursed monthly at its then-effective normal monthly billing rate. In addition, after the initial twenty-four (24) months of this AGREEMENT, AMGEN shall, upon reasonable notice from and request by ORTHO, assign to HEPATITIS B and/or IL-2 a reasonable number of Scientists for whose work AMGEN shall be reimbursed monthly at its then-effective normal monthly billing rate per Scientist.

(b) ORTHO shall pay for any contracted services identified in the Development Program including, but not limited to, clinical studies and consultant services.

(c) At the end of each calendar month, AMGEN shall submit a written statement containing reasonable detail to ORTHO setting forth the number of Scientist-months of work that it performed during such calendar month and any other related outside expenditures. After ORTHO has received such a statement and has had a reasonable period, not to exceed thirty (30) days to review it, ORTHO shall promptly pay AMGEN an amount equal to AMGEN's then-effective monthly billing rate times the Scientist-months involved in conducting projects under the Development Plan for such month, and any related out-of-pocket travel and lodging expenditures outside the United States. AMGEN shall notify ORTHO of any change in accordance with this

paragraph in writing at least thirty (30) days in advance of the proposed change.

3.03 RECORDS OF COSTS.  
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AMGEN shall keep correct and complete records containing all information required for the determination of costs to be paid to it under this AGREEMENT for a period of not less than three (3) years after the performance of any services hereunder. AMGEN shall permit the books and records that it keeps pursuant to this Paragraph to be inspected and audited during reasonable business hours by an independent certified public accountant selected by ORTHO, to the extent necessary to verify such costs. The parties hereby acknowledge that any work that is to be performed by AMGEN for ORTHO under the Development Program shall be as an independent contractor, and that ORTHO shall not incur any obligations for the remuneration or other expenses (and relevant reporting obligations) of any employee of AMGEN by virtue of such employee's participation in the Development Program.

3.04 DISCLOSURE OF PRODUCT TECHNOLOGY.  
-----

(a) For purposes of advancing the Development Program, AMGEN and ORTHO shall disclose to each other any information, including such technology as may be characterized

as inventive and appropriate for reduction to patent applications which shall be prepared and filed by the developing party's Patent Counsel and subsequently included in Exhibit D of this AGREEMENT, that each has relating to the FIELD OF ACTIVITY and which will be useful in furthering the goals of the Development Program. To further promote the purposes of the Development Program, each party shall actively collaborate with the other by disclosing on a regular and periodic basis, such technical, clinical and other information developed by such party that is pertinent to the progress of the Development Program. AMGEN and ORTHO each acknowledge that any technical and other information disclosed under this Paragraph 3.04 shall be considered LICENSED KNOW-HOW and further agree that any such technical, clinical and other information shall not otherwise be disclosed except as permitted by this AGREEMENT.

(b) To facilitate further effective commercial development, and registration of the PRODUCTS within the FIELD OF ACTIVITY, AMGEN shall, within reason, permit representatives of ORTHO to inspect its respective facilities, technical reports, memoranda and other documents, including but not limited to laboratory notebooks, directly relating to the Development Program, and to make copies of any and all such reports, memoranda and other documents; provided, however, that the rights hereunder shall not extend beyond the LICENSED

KNOW-HOW and shall be limited solely to information that has been actually used by AMGEN for the development of the PRODUCTS.

(c) Upon commencement of the Development Program, AMGEN agrees to supply ORTHO with sufficient technical information and assistance for ORTHO to be able to assess the progress of the work performed under the Development Plan during the course of the Development Program. Any technical information supplied by a party to the other hereunder shall remain confidential and shall thereafter be deemed a part of the LICENSED KNOW-HOW for purposes hereof.

3.05 DISCLOSURE OF LICENSED KNOW-HOW  
-----

AMGEN shall disclose to ORTHO on a continuing basis all such LICENSED KNOW-HOW including the contents of any AMGEN IND filed in the United States pursuant to the regulations of the FDA as is reasonably required for ORTHO to conduct PHASE I and PHASE II studies, clinical studies and obtain product registration of LICENSED PRODUCTS in the LICENSED TERRITORY and including specific details with respect to the manufacture of LICENSED PRODUCTS. With respect to information for the manufacture of LICENSED PRODUCTS not contained in INDs, AMGEN shall disclose same to ORTHO upon receipt of the payments set forth in Paragraph 5.01 (iii). Additionally, AMGEN shall promptly provide ORTHO with sufficient information necessary to

satisfactorily assess the progress of its work with respect to the development of LICENSED PRODUCTS. ORTHO shall also provide AMGEN with sufficient information necessary to enable AMGEN to satisfactorily assess the progress of ORTHO's clinical testing and LICENSED PRODUCTS registration work.

### 3.06 IMPROVEMENTS

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3.06.1 If AMGEN, on the one hand, or ORTHO and/or its AFFILIATES and sublicensee(s), on the other hand, improve the PRODUCT ORGANISMS, and/or the LICENSED KNOW-HOW, or make LICENSED PRODUCTS or process improvements, all such improvements shall become part of the LICENSED KNOW-HOW and shall be promptly transferred and/or communicated to the other party in order to maintain parity among AMGEN, ORTHO and its AFFILIATES and sublicensees and by the provisions hereof shall be deemed to be a part of the LICENSED PATENTS or LICENSED KNOW-HOW as the case may be and licensed to AMGEN or ORTHO, as the case may be, on a royalty-free basis.

3.06.2 Notwithstanding any provision of this AGREEMENT, any technology and/or improvements developed by a party to this AGREEMENT and disclosed or licensed under this Article 3, shall be and remain the property of the developing party.

This Paragraph 3.06.2 shall survive any termination of this AGREEMENT.

3.07 WARRANTY  
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AMGEN warrants that any vialled clinical PRODUCTS and/or PRODUCT ORGANISMS provided to ORTHO for use in accordance with the provisions of this AGREEMENT shall conform with the description and specifications set forth in the appropriate AMGEN IND or supplement thereof and shall be suitable for use as set forth in said IND. AMGEN expressly disclaims all other warranties, expressed or implied, including without limitation warranties of merchantability or fitness for a particular purpose with respect to the vialled clinical PRODUCTS and/or PRODUCT ORGANISMS furnished by AMGEN to ORTHO hereunder.

ARTICLE 4  
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CLINICAL STUDIES AND REGISTRATION  
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4.01 EPO  
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AMGEN shall, as soon as practicable and at its own expense, conduct the necessary studies and testing and prepare and file an IND for EPO for dialysis indication in the United States and shall so advise ORTHO in writing and provide ORTHO

with copies of all materials filed with the FDA. AMGEN shall, at its own expense, have the responsibility to comply, with respect to any IND filed by AMGEN, with any FDA request for all additional information and repetition of tests required by the FDA sufficient to enable ORTHO to commence or continue clinical studies in the United States; provided that said FDA request has been identified within a one hundred-twenty (120) day period of the initial filing date of said IND as acknowledged by the FDA. AMGEN shall, at its own expense exert reasonable efforts to conduct toxicology and dosage studies, model studies and clinical studies with respect to dialysis patients and shall file an NDA if sufficient supporting data can be developed. ORTHO shall, at its own expense conduct toxicology and dosage studies, model studies and clinical studies for not less than two (2) other indications and shall file appropriate NDA's or supplements if sufficient supporting data can be developed. ORTHO shall have the right to use such materials and any supporting data thereof for the filing of foreign registrations corresponding to AMGEN's INDs, NDAs and all supplements thereto.

4.02 HEPATITIS B and IL-2.  
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AMGEN shall, as soon as practicable and at its own expense conduct the necessary studies and testing and prepare and file INDs for HEPATITIS B and IL-2 in the United States and

shall so advise ORTHO in writing and provide ORTHO with copies of all materials filed with the FDA. ORTHO shall have the right to use such materials and any supporting data thereof for the filing of United States or foreign registrations. AMGEN shall, at its own expense, have the responsibility to comply, with respect to any IND filed by AMGEN, with any FDA request for all additional information and repetition of tests required by the FDA sufficient to enable ORTHO to commence or continue clinical studies in the United States; provided that said FDA request has been identified within a one hundred-twenty (120) day period of the initial filing date of said IND as acknowledged by the FDA. For each of HEPATITIS B and IL-2, ORTHO shall, at its own expense, conduct appropriate toxicology and dosage studies, model studies and clinical studies for a reasonable number of indications and shall file an NDA for each indication for which sufficient supporting data can be developed.

4.03 INDEPENDENT CLINICAL TESTING.  
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ORTHO agrees to conduct at its own expense through OUTSIDE RESEARCH PAYMENTS such clinical testing with an individual or individuals or entities other than AMGEN or ORTHO or an AFFILIATE as is necessary solely for purposes of independent determination of safety and efficacy of any of the

LICENSED PRODUCTS in connection with the filing of NDAs for such LICENSED PRODUCTS.

4.04 ORTHO STUDIES

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ORTHO, at its sole cost and expense, shall use its reasonable efforts in the LICENSED TERRITORY to pursue the preclinical, clinical and other studies outlined in the Development Program. ORTHO shall keep and maintain complete and accurate records of all work that it does in connection with this AGREEMENT. These records shall be made available by ORTHO at reasonable times for examination at AMGEN's request. In addition, ORTHO shall provide AMGEN with sufficient technical information and assistance as is necessary for AMGEN to assess the progress of ORTHO in its clinical studies and registration. In connection with such clinical testing, AMGEN shall supply, at AMGEN's sole cost and expense, reasonable quantities of vialled clinical PRODUCTS ready for clinical use and sufficient for ORTHO to utilize for such purposes. If AMGEN is unable to supply one hundred (100) percent of ORTHO's needs for said clinical testing, then ORTHO shall have the right, but not the obligation, to manufacture its needs and AMGEN shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to so manufacture. Notwithstanding the above, if AMGEN is unable to supply one hundred (100) percent of ORTHO's needs for

said clinical testing, it shall provide to ORTHO at least fifty (50) percent of its manufacture of such vialled clinical PRODUCTS and shall not provide any of said PRODUCTS to any third party. Notwithstanding the foregoing, if successful clinical studies and registrations occur anywhere in the LICENSED TERRITORY outside the United States prior to the time clinical studies and registration are completed in the United States, then AMGEN shall supply said PRODUCTS to ORTHO only as may be permitted by applicable United States laws and regulations. If AMGEN is unable to so supply as a result of United States laws and regulations, then ORTHO shall have the right, but not the obligation to manufacture its needs of said PRODUCTS and AMGEN shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such PRODUCTS.

4.05 RECORDS AND PROGRESS.  
-----

ORTHO and AMGEN shall keep and maintain complete and accurate records of all work including all FDA filings that either has done in connection with LICENSED PRODUCTS. The parties agree to provide each other with sufficient technical information and assistance as is necessary for each of them to assess the progress of the other party in its clinical testing of PRODUCTS and in its filing of INDs and NDAs in connection with such PRODUCTS including but not limited to AMGEN informing

ORTHO of all communications and discussions with the FDA relating to its INDs.

4.06 ACCESS TO FDA FILES  
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(i) With respect to EPO, AMGEN and ORTHO agree that each shall have access to and the exclusive and irrevocable right to refer to and cross-reference each other's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and the Product License Agreement and with respect to AMGEN not for any purpose other than dialysis and each agrees to provide all appropriate documentation necessary to achieve the purposes of this AGREEMENT. The parties agree to notify the FDA of the right to cross-reference the above-described documents and to execute and file all the necessary papers and documents required to allow each to exercise its rights under this AGREEMENT.

(ii) With respect to HEPATITIS B and IL-2, AMGEN and ORTHO agree that ORTHO shall have access to and the exclusive and irrevocable right to refer to and cross-reference AMGEN's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and AMGEN agrees to provide all appropriate documentation to achieve the purposes of this AGREEMENT. AMGEN further agrees, upon request by ORTHO, to further notify the FDA

of ORTHO's right to cross-reference the above-described documents and to execute and file all the necessary papers and documents required to allow ORTHO to exercise its rights under this AGREEMENT.

(iii) With respect to HEPATITIS B, AMGEN and ORTHO agree that AMGEN shall have access to and the exclusive and irrevocable right to refer to and utilize ORTHO's INDs, NDAs and supplements thereto provided that AMGEN demonstrates such is necessary for it to pursue its registration of HEPATITIS B in China and for no other purpose.

#### 4.07 CONTINUING OBLIGATIONS

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During the term of this AGREEMENT, AMGEN and ORTHO each shall have a continuing obligation to advise each other of any adverse drug reactions or any governmental regulatory problems, notices, actions or communications and to keep all INDs, NDAs and supplements thereto current and in full force and effect relating to the manufacture or use, of LICENSED PRODUCTS.

ARTICLE 5

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MILESTONE EVENTS AND ROYALTY PAYMENTS  
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5.01 In accordance with the grant of Paragraph 2.01, ORTHO shall make the following royalty payments to AMGEN at the following times in accordance with the occurrence of the following milestone events:

(i) \$4,000,000 - due and payable upon execution of this AGREEMENT as an aggregate initial royalty payment and allocable as follows:

\$1,000,000 - to EPO  
\$2,000,000 - to HEPATITIS B  
\$1,000,000 - to IL-2

(ii) Three \$1,000,000 royalty payments - each due and payable upon written notice and proof to ORTHO by AMGEN that both AMGEN and ORTHO are lawfully entitled to commence clinical studies based on approvals of AMGEN INDs and further that AMGEN has committed to perform any studies other than clinical studies which the FDA has requested for clinical studies to commence or continue.

(iii) \$11,000,000 - due and payable as set forth below upon achievement by either AMGEN or ORTHO of CLINICAL EFFICACY for each of EPO, HEPATITIS B and IL-2 respectively as evidenced

by written notice and proof that CLINICAL EFFICACY has been demonstrated applicable to each such LICENSED PRODUCT. The respective sum for each LICENSED PRODUCT shall be payable and allocable as follows:

\$5,000,000 - to EPO

\$3,000,000 - to HEPATITIS B

\$3,000,000 - to IL-2

5.02 PAYMENT DATES.  
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The milestone royalty payments set forth in Paragraph 5.01 shall each be due and payable to AMGEN by ORTHO thirty (30) days following the notices provided for in Paragraphs 5.01 (ii) and 5.01 (iii) respectively.

5.03 RECOVERY PAYMENTS  
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If AMGEN and ORTHO proceed with a Product License Agreement to market LICENSED PRODUCTS, ORTHO shall be entitled to recover the royalty payments of this Article 5 in accordance with the provisions set forth in said Agreement.

5.04 PHASE I REIMBURSEMENT  
-----

ORTHO shall reimburse AMGEN upon presentation of suitable documentation for AMGEN's cost of PHASE I clinical studies regarding the PRODUCTS prior to CLOSING, but such

reimbursement shall not exceed an aggregate of \$250,000 for all of the PRODUCTS.

ARTICLE 6

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CONFIDENTIALITY

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6.01 LIMITATIONS OF USAGE

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All confidential information transmitted by either party to the other including all confidential information developed pursuant to this AGREEMENT, shall be identified with reference to this AGREEMENT and the receiving party shall, while this AGREEMENT is in effect and for three (3) years after termination thereof, make no use of this information other than in furtherance of this AGREEMENT and shall use the same efforts to keep secret and prevent the disclosure of such information to parties other than its agents, officers, employees and representatives authorized to receive such information as it would its own confidential information except for such confidential information that,

(a) was known to the receiving party at the time of its disclosure and not subject to any obligation of confidentiality at the time of its disclosure;

(b) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(c) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this AGREEMENT; or

(d) became known to the receiving party after its disclosure (i) from a source other than the disclosing party (including from independent development by the receiving party), (ii) other than from a third party who had an obligation to the disclosing party not to disclose such information to others, and (iii) other than under an obligation of confidentiality.

Each receiving party may disclose any of the LICENSED KNOW-HOW and confidential information to the extent such disclosure is necessary to comply with applicable laws or regulations, or to make and use LICENSED PRODUCTS in accordance with the terms of this AGREEMENT.

ARTICLE 7

PATENTS

7.01 PROSECUTION AND MAINTENANCE

AMGEN agrees to faithfully continue, at its expense, the prosecution of all patent applications listed in Exhibit D within the LICENSED FIELD and, when necessary, to file and prosecute additional applications covering patentable technology relating to EPO, HEPATITIS B and IL-2 in the United States and other countries throughout the world. AMGEN shall have the duty and responsibility to pay all taxes and annuities on all applications and patents listed in Exhibit D of the AGREEMENT. AMGEN shall provide ORTHO with copies of all applications listed in Exhibit D, all future-filed applications within the LICENSED FIELD and all correspondence with Patent Offices applicable thereto. If AMGEN chooses not to prosecute and maintain certain applications/patents under this AGREEMENT, AMGEN shall so notify ORTHO and ORTHO shall, in its sole discretion, decide whether to assume the responsibility and expenses therefore for each such application or patent. In that event, the applications/patents for which ORTHO shall assume responsibility shall be assigned to ORTHO.

7.02 REVIEW  
-----

AMGEN shall give ORTHO the opportunity to review, through their patent counsel, the status of all pending patent applications listed in Exhibit D and shall keep ORTHO informed of the status of their prosecution, including such Patent Office proceedings as interferences, reexamination, oppositions and requests for patent term extension under the Act. Notwithstanding the above, AMGEN shall have sole responsibility for all decisions in connection with the filing and prosecution of all patent applications and the maintenance of all patents. AMGEN shall take all appropriate actions to maximize the benefits for both AMGEN and ORTHO with respect to any patent term restoration and/or regulatory exclusivity that may be available in connection with any LICENSED PATENT or LICENSED PRODUCT.

ARTICLE 8  
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ENFORCEMENT  
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8.01 INFRINGEMENT BY ORTHO  
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(i) If, as a result of the manufacture and use of LICENSED PRODUCTS, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action by a third party, then ORTHO shall actively consult with AMGEN in its attempts to

resolve same. If the settlement of a lawsuit or threatened lawsuit or other action requires any payments to a third party, then ORTHO and AMGEN shall share said payments on an equal basis.

(ii) If, as a result of the manufacture and use of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action and as a result of same ORTHO is prevented from the commencement of marketing said LICENSED PRODUCT, then provided that one or more other LICENSED PRODUCTS are being marketed or in the future are marketed or said LICENSED PRODUCT is being marketed or in the future is marketed in another country, ORTHO shall be entitled to recover the following in the manner provided in Paragraph 4.01 of the Product License Agreement from the sale of any LICENSED PRODUCT:

(a) the equivalent of up to 100% of the research and development payments made by ORTHO to AMGEN under Paragraph 3.02 of this AGREEMENT for said LICENSED PRODUCT; and

(b) the equivalent of up to 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with ARTICLE 4 of this AGREEMENT.

(iii) In connection with any lawsuit or threatened lawsuit or other action as set forth in (i) or (ii) above, ORTHO and AMGEN shall share on an equal basis all reasonable expenses (including attorneys' fees) incurred therewith.

8.02 INFRINGEMENT BY THIRD PARTIES  
-----

Either party shall promptly notify the other party of any infringement of any LICENSED PATENTS; misappropriation of a trade secret or declaration of an interference proceeding relating to LICENSED PATENTS or LICENSED KNOW-HOW, and shall provide the other party with all available evidence relating thereto. AMGEN and ORTHO shall then consult with each other as to the best manner in which to proceed. AMGEN shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If AMGEN requests ORTHO to join AMGEN in such suit or action and ORTHO agrees to do so, ORTHO shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. AMGEN shall pay ORTHO its reasonable expenses (including its attorney's fees) in connection with any such suit or action. Should AMGEN lack standing to bring any such action, then AMGEN may cause ORTHO to do so upon first undertaking to indemnify and hold ORTHO harmless (to the extent

permissible by law) from all consequent liability and to promptly reimburse all reasonable expense (including attorney fees) steaming therefrom. In the event AMGEN fails to take action with respect to such matters within a reasonable period, not more than six (6) months, following receipt of such notice and evidence, ORTHO shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If ORTHO finds it necessary to join AMGEN in such suit or action, AMGEN shall execute all papers and perform such other acts as may be reasonably required and may, at its option. be represented by counsel of its choice. ORTHO shall pay to AMGEN the reasonable expenses of AMGEN (including its attorney's fees) in connection with any such suit or action. Absent an agreement between the parties to jointly bring any action or suit hereunder and share the expenses thereof, any amount recovered in any such action or suit shall be retained by the party bearing the expenses thereof.

ARTICLE 9

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TERM AND TERMINATION  
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9.01 TERM

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This AGREEMENT shall come into effect on the EFFECTIVE DATE and shall terminate on the tenth (10th) year anniversary of the EFFECTIVE DATE or as to each LICENSED PRODUCT separately upon receipt of an approval letter on a LICENSED PRODUCT from the FDA, or the counterpart of said approval letter on a LICENSED PRODUCT in any MAJOR COUNTRY, whichever occurs first.

9.02 RIGHTS UPON TERMINATION

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Upon termination of this AGREEMENT as provided for in Paragraph 9.01 above, all LICENSED PATENTS and LICENSED KNOW-HOW shall become the sole property of AMGEN, and ORTHO shall have no further rights thereto under this AGREEMENT. Any rights ORTHO might obtain with respect to LICENSED PATENTS and LICENSED KNOW-HOW shall be in accordance with the provisions of the Product License Agreement to market LICENSED PRODUCTS.

9.03 DEFAULT

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In the event that AMGEN or ORTHO (the "Defaulting party") shall:

a) default in a material obligation hereunder, including failure to make any payments, and fail to remedy such default within 60 days after notice of such default by the Non-Defaulting party; or

b) become bankrupt or insolvent, or file a petition in bankruptcy or make a general assignment for the benefit of creditors or otherwise acknowledge insolvency or be adjudged bankrupt; or

c) go or be placed in a process of complete liquidation other than for an amalgamation or reconstruction; or

d) suffer the appointment of a receiver for any substantial portion of its business who shall not be discharged within 60 days after such receiver's appointment, then, and in any such event, the Non-Defaulting party, at its option, may terminate its obligations to, and the rights of, the Defaulting party under the license granted in this AGREEMENT upon 30 days written notice to the Defaulting party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

9.04 ORTHO'S RIGHTS UPON DEFAULT

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Upon termination of this AGREEMENT as a result of AMGEN's default under Paragraph 9.03, ORTHO shall have the right, but not the obligation, to make, use and sell LICENSED PRODUCTS under LICENSED PATENTS and LICENSED KNOW-HOW, and all of ORTHO's payment obligations under this AGREEMENT shall continue, provided however, that ORTHO shall have the right to off-set against any such payments any and all expenses incurred as a result of AMGEN's default.

9.05 SURVIVAL

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Notwithstanding the termination of a party's obligations to or the rights of the Defaulting party under this Agreement in accordance with the provisions of Paragraph 9.03, the provisions of Article 6 shall survive such termination and continue in full force and effect for a period of not more than three (3) years following termination.

9.06 EFFECT OF TERMINATION

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Nothing herein shall limit any remedies available to either party at law or in equity for the default of the other party under Paragraph 9.03 (b), (c) or (d). Termination shall not excuse the obligation of either party to pay money due to the other party.

ARTICLE 10

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MISCELLANEOUS PROVISIONS

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10.01 NO INFRINGEMENT

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AMGEN is not aware of (i) any third party rights upon which, in its opinion, this AGREEMENT will infringe, or (ii) any claimed infringement against AMGEN with respect to LICENSED PRODUCTS.

10.02 EFFORTS

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The parties hereto shall use reasonable and practical efforts to obtain any and all consents, approvals, orders or authorizations required to be obtained with respect to the provisions hereof.

10.03 NOTICES

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All notices, requests, demands and other communications required or permitted to be given under this AGREEMENT shall be in writing and shall be mailed to the party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return receipt requested, postage prepaid, and properly addressed as follows (in which case such notice shall be deemed to have

been duly given on the third (3rd) day following the date of such sending):

AMGEN  
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Amgen  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320-1789  
U.S.A.  
Telex No. 4994440 (AMGEN)  
Attn: Corporate Secretary

with a copy to:

Cooley, Godward, Castro,  
Huddleson & Tatum  
5 Palo Alto Square, Suite 400  
Palo Alto, CA 94306  
U.S.A.  
Telex No. 910-372-7370 COOLEY SFO  
380816 COOLEY PA EASYLINK  
Attn: Alan C. Mendelson, Esq.

ORTHO  
-----

President  
Ortho Pharmaceutical Corporation  
U.S. Route 202  
Raritan, New Jersey 08869  
U.S.A.

with a copy to:

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, N.J. 08933-7033  
U.S.A.  
Telex No. 844-481  
Attn: General Counsel

Any party by giving notice to the other in the manner provided above may change such party's address for purposes of this Paragraph 10.03.

10.04 ENTIRE AGREEMENT; AMENDMENT  
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This AGREEMENT (together with all Exhibits attached hereto) constitutes the full and complete Agreement and understanding between the parties hereto and shall supersede any and all prior written and oral agreements, including but not limited to any "Agreement in Principle", concerning the subject matter contained herein. This AGREEMENT may not be modified or amended nor may any provision hereof be waived without a written instrument executed by AMGEN and ORTHO.

10.05 WAIVER  
-----

No failure or delay by any party to insist upon the strict performance of any term, condition, covenant or agreement of this AGREEMENT, or to exercise any right, power or remedy hereunder or consequent upon a breach hereof shall constitute a waiver of any such term, condition, covenant, agreement, right, power or remedy or of any such breach or preclude such party from exercising any such right, power or remedy at any later time or times.

10.06 HEADINGS  
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Headings in this AGREEMENT are included herein for the convenience of reference only and shall not constitute a part of this AGREEMENT for any purpose.

10.07 ARBITRATION AND ATTORNEYS' FEES AND COSTS  
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In the event any dispute should arise between the parties hereto as to the validity, construction, enforceability or performance of this AGREEMENT or any of its provisions, such dispute shall be settled by arbitration. Said arbitration shall be conducted at Chicago, Illinois, in accordance with the rules then obtaining of the American Arbitration Association with a panel of three (3) arbitrators. The rules of discovery then pertaining to the courts of law in such jurisdiction shall apply thereto. The unsuccessful party to such arbitration shall pay to the successful party all costs and expenses, including reasonable attorneys' fees incurred therein by such successful party.

10.8 GOVERNING LAW  
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This AGREEMENT shall be construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in that state.

10.9 BINDING EFFECT

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This AGREEMENT shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns.

10.10 NUMBER AND GENDER

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Words in the singular shall include the plural, and words in a particular gender shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.11 COUNTERPARTS

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This AGREEMENT may be executed in one or more counterparts by the parties hereto. All counterparts shall be construed together and shall constitute one AGREEMENT.

10.12 AGREEMENT TO PERFORM NECESSARY ACTS

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Each party agrees to perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary or desirable to carry out the provisions of this AGREEMENT.

#### 10.13 VALIDITY

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If for any reason any clause or provision of this AGREEMENT, or the application of any such clause or provision in a particular context or to a particular situation, circumstance or person, should be held unenforceable, invalid or in violation of law by any court or other tribunal, then the application of such clause or provision in contexts or to situations, circumstances or persons other than that in or to which it is held unenforceable, invalid or in violation of law shall not be affected thereby, and the remaining clauses and provisions hereof shall nevertheless remain in full force and effect, provided however, that any provisions so held unenforceable, invalid or in violation of law shall be rewritten by the parties in a lawful manner to reflect its intent.

#### 10.14 REPRESENTATIONS

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Each of the parties hereto acknowledges and agrees (i) that no representation or promise not expressly contained in this AGREEMENT has been made by the other party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this AGREEMENT is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this AGREEMENT; and (iii) that

each party has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this AGREEMENT.

10.15 ASSIGNMENT  
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Neither party shall assign its rights or obligations under this AGREEMENT without prior written consent of the other party, provided however, ORTHO may assign its rights and obligations by sublicensing its AFFILIATES or third parties as provided in Paragraph 2.02 hereinabove.

10.16 INDEPENDENT CONTRACTORS  
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AMGEN and ORTHO shall not be deemed to be partners, joint venturers or each other's agents, and neither shall have the right to act on behalf of the other except as expressly provided hereunder or otherwise expressly agreed to in writing.

10.17 FORCE MAJEURE  
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Neither party shall be liable for failure to perform as required by any provision of this AGREEMENT where such failure results from a force majeure beyond such party's control. In the event of any delay attributable to a force majeure, the time for performance affected thereby shall be

extended for a period equal to the time lost by reason of the delay. If, as a result of a force majeure, AMGEN is unable to manufacture LICENSED PRODUCTS, for the purposes of this AGREEMENT, then, ORTHO shall have the right, but not the obligation, to manufacture said LICENSED PRODUCTS and AMGEN shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such LICENSED PRODUCTS.

10.18 INDEMNITY  
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Each party to this AGREEMENT shall be responsible for its own acts relating to the manufacture and use of LICENSED PRODUCTS and neither shall indemnify the other for costs, expenses, liability, damages and claims for any injury or death to persons or damage to or destruction of property or other loss arising out of or in connection with any LICENSED PRODUCTS made or used by either party.

10.19 PUBLICITY AND DISCLOSURE  
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In the absence of specific agreement between the parties, neither party shall originate any publicity, news release or other public announcement, written or oral, whether to the public press, to stockholders or otherwise, relating to this AGREEMENT, to any amendment hereto as to performance

hereunder, save only such announcement as in the opinion of legal counsel to the party making such announcement is required by law or practice to be made. The party making any such announcement shall give the other party an opportunity to review the form of the announcement before it is made. Routine references to this AGREEMENT and the arrangements hereunder without undue frequency and without emphasis shall be allowed in the usual course of business provided that notice of such use is given to the other party. If, in the opinion of ORTHO, excessive use occurs, such references shall be discontinued after discussion among the parties.

10.20 COSTS AND EXPENSES

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AMGEN and ORTHO shall each bear and pay for their respective costs and expenses regarding the negotiation and preparation of this AGREEMENT and all documents, instruments and agreements related thereto.

10.21 EXPORT CONTROL LAWS

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10.21.1 The parties hereby agree that any Technical Data (as that term is defined in Section 379.1 of the U.S. Export Administration Regulations) exported from the United States pursuant to this AGREEMENT and any other related agreements, and any direct product thereof, shall not be

shipped, either directly or indirectly, to Afghanistan or any Group P, Q, S, W, Y or Z Countries (as specified in Supplement No. 1 to part 370 of the Export Administration Regulations), unless (i) separate specific authorization to reexport such Technical Data or such direct products is provided by the U.S. Office of Export Administration or (ii) such specific authorization is not required pursuant to part 379.8 of the U.S. Export Administration Regulations. The parties further agree that the export and reexport of commodities pursuant to this AGREEMENT and any other related agreements shall be subject to the licensing requirements of the U.S. Export Regulations.

10.21.2 In the event that a specific authorization of, or a validated license from, a government other than that of the exporting party is required, AMGEN and ORTHO each agree that the party within the jurisdiction of such other government shall upon the request of the party proposing to make the export use reasonable efforts to obtain, as expeditiously as applicable, the requisite authorization or license.

IN WITNESS WHEREOF, the undersigned have caused this AGREEMENT to be executed by their duly authorized

representatives in the manner legally binding upon them on the first date written above.

AMGEN  
a California corporation

/s/ Robert D. Weist

-----  
Witness

By /s/ George B. Rathmann

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George B. Rathmann, President

ORTHO PHARMACEUTICAL CORPORATION  
a New Jersey corporation

/s/ Dennis N. Longstreet

-----  
Witness

By /s/ Gary V. Parlin

-----  
Gary V. Parlin, President

EXHIBIT A

DESCRIPTION OF ERYTHROPOIETIN

The chemical structure of r-HuEPO is best described by its amino acid sequence which is depicted below:

NH\2\ - ala pro pro arg leu ile cys asp ser arg val leu glu arg try  
leu leu glu ala lys glu ala glu asn<sup>Y\*</sup> ile thr thr gly cys ala  
glu his cys ser leu asn glu asn<sup>Y</sup> ile thr val pro asp thr lys  
val asn phe tyr ala trp lys arg met glu val gly gln gln ala  
val glu val trp gln gly leu ala leu leu ser glu ala val leu  
arg gly gln ala leu leu val asn<sup>Y</sup> ser ser gln pro trp glu pro  
leu gln leu his val asp lys ala val ser gly leu arg ser leu  
thr thr leu leu arg ala leu gly ala gln lys glu ala ile ser  
pro pro asp ala ala ser ala ala pro leu arg thr ile thr ala  
asp thr phe arg lys leu phe arg val tyr ser asn phe leu arg  
gly lys leu lys leu tyr thr gly glu ala cys arg thr gly asp  
arg - COOH

\* 'Y' designates N-linked glycosylation site.

EXHIBIT B

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DESCRIPTION OF HEPATITIS B

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The chemical structure of recombinant yeast-derived hepatitis B surface antigen is best described by its amino acid sequence which is depicted below:

NH\2\ -Met    glu  asn  ile  thr ser gly phe leu gly pro leu leu val leu gln  
                  ala gly phe phe leu leu thr  arg  ile  leu thr ile pro gln ser  
                  leu asp ser trp trp thr ser leu asn phe leu gly gly  ser  pro  
                  val cys leu gly gln asn ser gln ser pro thr ser asn his ser  
                  pro thr ser cys  pro  pro  ile cys pro gly tyr arg trp met cys  
                  leu arg arg phe ile ile phe leu phe ile  leu  leu  leu cys leu  
                  ile phe leu leu val leu leu asp tyr gln gly met leu pro val  
                  cys  pro  leu  ile pro gly ser thr thr thr ser thr gly pro cys  
                  lys thr cys thr thr pro ala  gln  gly  asn ser met phe pro ser  
                  cys cys cys thr lys pro thr asp gly asn cys thr cys  ile  pro  
                  ile pro ser ser trp ala phe ala lys tyr leu trp gly trp ala  
                  ser val arg phe  ser  trp  leu ser leu leu val pro phe val gln  
                  trp phe val gly leu ser pro thr val trp  leu  ser  ala ile trp  
                  met met trp tyr trp gly pro ser leu tyr ser ile val ser pro  
                  phe ile pro leu leu pro ile phe phe cys leu trp val tyr ile  
COOH

EXHIBIT C

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DESCRIPTION OF INTERLEUKIN-2  
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The chemical structure of recombinant-methionyl human interleukin 2 [alanine 125] is best described by its amino acid sequence which is depicted below:

NH\2\ - Met-ala pro thr ser ser ser thr lys lys thr gln leu gln leu glu his  
leu leu leu asp leu gln met ile leu asn gly ile asn asn tyr lys  
asn pro lys leu thr arg met leu thr phe lys phe tyr met pro lys  
lys ala thr glu leu lys his leu gln cys leu glu glu glu leu lys  
pro leu glu glu val leu asn leu ala gln ser lys asn phe his leu  
arg pro arg asp leu ile ser asn ile asn val ile val leu glu leu  
lys gly ser glu thr thr phe met cys glu tyr ala asp glu thr ala  
thr ile val glu phe leu asn arg trp ile thr phe ala glu ser ile  
ile ser thr leu thr COOH

## Exhibit D-1

## ERYTHROPOIETIN

Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
155	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	561,024	12/13/83
155-CIP-1	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	582,185	2/21/84
155-CIP-2	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	655,841	9/28/84
155-CIP-3	F. Lin	Production of Erythropoietin	U.S.	675,298	11/30/84
132	J. Egrie	ATCC HB8209 - Its Monoclonal Antibody to Erythropoietin ATCC HB8209/Budapest	U.S.	463,724	2/4/83
190	P. Lai T. Strickland	Protein Purification	U.S.	747,119	6/20/85

Exhibit D-2

HEPATITIS B

Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
106-C	G. Bitter	Expression of Exogenous Polypeptides and Polypeptide Products Including Hepatitis B Surface Antigen	U.S.	748,712 (A continuation of S.N. 412,707 filed 8/30/82)	6/26/85
204	J. Fieschko	Fermentation Methods for Hepatitis Vaccine Production	U.S.	*	8/15/85
201	H. Levine	Lysis Method and Buffer for Extraction of HBsAg from Yeast Cells	U.S.	*	8/15/85

\*Information not yet available

Exhibit D-3

INTERLEUKIN II

Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
138	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	521,967	8/10/83
138-CIP-1	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	635,941	8/3/84
			Canada	460,745	8/10/84
			Israel	72643	8/10/84
			Japan	Via PCT US84/01252	8/9/84
		EPO	designating	84.109537.5	8/10/84
			Austria		
			Belgium		
			France		
			Germany		
			Italy		
			Luxembourg		
			Netherlands		
			Sweden		
			Switzerland		
			Liechtenstein		
			United Kingdom		
-CIP-2	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	717,334	3/29/85

9-30-85 (K-A)

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PRODUCT LICENSE AGREEMENT  
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THIS PRODUCT LICENSE AGREEMENT entered into this 30th day of September, 1985, by and between KIRIN-AMGEN, INC., a California corporation having offices at 1900 Oak Terrace Lane, Thousand Oaks, California 91320-1789 (said corporation hereinafter referred to as "K-A") and ORTHO PHARMACEUTICAL CORPORATION, A New Jersey corporation having offices at U.S. Route 202, Raritan, New Jersey 08869, (said corporation hereinafter referred to as "ORTHO").

WITNESSETH:  
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WHEREAS, K-A represents that it has developed and is continuing to develop technology relating to erythropoietin and processes for its manufacture;

WHEREAS, K-A further represents that it is the owner or licensee of patent applications by assignment and unpatented know-how covering said erythropoietin;

WHEREAS, ORTHO and AFFILIATES are engaged in the research, development and sale of health care products throughout the world and wish to obtain certain rights to such technology and to such patents and patent applications;

WHEREAS, ORTHO and K-A have entered into a TECHNOLOGY LICENSE AGREEMENT on even date herewith for the research, development and regulatory approval of various products;

WHEREAS, K-A is a joint venture between Amgen of Thousand Oaks, California and Kirin Brewery Co., Ltd. of Tokyo, Japan and each, respectively, has consented to the execution of this AGREEMENT and a Product License Agreement and each has by separate written undertaking to ORTHO effective September 30, 1985, and incorporated herein by reference, agreed: (a) that each will make available to K-A all information and documents and provide assistance in order that K-A perform all of its obligations hereunder including but not limited to providing to ORTHO all information and documents provided for under this AGREEMENT; (b) that each has consented to ORTHO having the right to manufacture EPO in the United States for use and sale outside the United States except in China and Japan; and (c) that in the event K-A is dissolved, each shall, to the extent legally possible, continue to fulfill all obligations and duties under this AGREEMENT.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein recited, and other good and valuable considerations, the receipt of which is acknowledged, it is agreed as follows:

ARTICLE 1

DEFINITIONS

For the purposes of this Agreement, the terms set forth in this Article I shall have the following meanings:

1.01 "AFFILIATE" shall mean and include (i) any company which owns or controls directly or indirectly at least forty percent (40%) of the voting stock of ORTHO and (ii) any other company at least forty percent (40%) of whose voting stock is owned or controlled directly or indirectly by such owning or controlling company, and (iii) any other company with which ORTHO or such an owning, owned, controlling or controlled company has a co-marketing, joint venture or distribution agreement for pharmaceuticals outside the United States. The term "ORTHO" shall also mean and include any AFFILIATE wherein the inclusion of same shall be warranted under the provisions of the AGREEMENT.

1.02 "AGREEMENT" shall mean this Product License Agreement.

1.03 "CLOSING" shall occur when, :

(a) K-A shall execute and deliver to ORTHO this AGREEMENT and the TECHNOLOGY LICENSE AGREEMENT.

(b) ORTHO shall execute and deliver to K-A this AGREEMENT and the TECHNOLOGY LICENSE AGREEMENT; and

(c) The following approvals shall have been obtained: (i) the Board of Directors of K-A shall have authorized K-A's participation in, and its execution and delivery of, this AGREEMENT including the Exhibits attached hereto, and the TECHNOLOGY LICENSE AGREEMENT; and (ii) the Board of Directors of ORTHO shall have authorized ORTHO's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and the TECHNOLOGY LICENSE AGREEMENT.

1.04 "EFFECTIVE DATE" shall be contingent on certain events and shall mean the date on which this AGREEMENT takes effect which shall be without interruption and simultaneous with the termination of and in accordance with the provisions of Article 9 of the TECHNOLOGY LICENSE AGREEMENT; provided that, if this AGREEMENT takes effect as a result of the receipt of an approval letter to market a LICENSED PRODUCT in a MAJOR COUNTRY or if there is a pending but as yet unapproved NDA or corresponding registration in any MAJOR COUNTRY, this AGREEMENT shall then be in effect in the entire LICENSED TERRITORY with respect to said PRODUCT. If there is not an approved NDA or corresponding registration in a MAJOR COUNTRY but such approval has been granted to permit marketing of a LICENSED PRODUCT and sales of said LICENSED PRODUCT commence in another country in the TERRITORY, this AGREEMENT shall not come into effect but the payment provisions of Article 4 of

this AGREEMENT shall be followed with respect to the sale of LICENSED PRODUCTS in said country.

1.05 "EPO" shall mean erythropoietin as described in Exhibit A.

1.06 "FDA" shall mean the United States Food & Drug Administration and foreign counterparts thereof.

1.07 "IND" shall mean a Notice of Claimed Investigational Exemption for a New Drug and all supplements under the United States Food, Drug & Cosmetic Act (FDA Act) and foreign counterparts thereof.

1.08 "LICENSED FIELD" shall mean and include EPO for all indications for human use except diagnostics.

1.09 "LICENSED KNOW-HOW" shall mean and include any and all data, information, technology or special ability on the part of K-A including, but not limited to, processes, techniques, methods, products, materials and compositions relating to the research, development, manufacture, testing or use of EPO, now owned or controlled by K-A or that shall be owned or controlled by K-A during the term of this AGREEMENT, which is reasonably related to LICENSED PATENTS and LICENSED PRODUCTS for use in the LICENSED FIELD; and which is useful in seeking approval from appropriate

governmental health authorities to market LICENSED PRODUCTS and which includes any K-A INDS, NDAs and all supplements thereto covering PRODUCTS in the LICENSED FIELD.

1.10 "LICENSED PATENTS" shall mean:

(a) any patent listed in Exhibit B;

(b) any patent application listed in Exhibit B, and any division, continuation, or continuation-in-part of any such application, and any patent which shall issue based on such application, division, continuation or continuation-in-part;

(c) any patent which is a reissue or extension of, or a patent of addition to, any patent defined in (a) or any application maturing into a patent defined in (b) above;

(d) any patent application or patent corresponding to any patent application or patent identified in (a), (b) or (c) above which is hereafter filed or issued in any country; and

(e) any patent application related to or based on any of K-A's technical information developed in the LICENSED FIELD during the performance of this AGREEMENT, and any division, continuation or continuation-in-part of any such application; and any patent which shall issue based on such application, division, continuation or continuation-in-part; and any patent which is a reissue or extension of, or a patent of addition to, any such patent.

1.11 "LICENSED PRODUCTS" shall mean and include any PRODUCTS for use in the LICENSED FIELD (i) which are within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (ii) whose use is within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iii) which are manufactured or packaged within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iv) which utilize any LICENSED KNOW-HOW.

1.12 "LICENSED TERRITORY" shall mean and include the entire world except (a) the United States, its territories and possessions, including the Commonwealth of Puerto Rico, (b) China and (c) Japan.

1.13 "MAJOR COUNTRY" shall mean any of the following: United States, United Kingdom, West Germany, France and Japan.

1.14 "NDA" shall mean a New Drug Application and/or a Product License Application and all supplements filed pursuant to the requirements of the FDA, including all documents, data and other information concerning LICENSED PRODUCTS which are necessary for or included in, FDA approval to market LICENSED PRODUCTS and foreign counterparts thereof of NDAs.

1.15 "NET SALES" shall mean the amount billed by ORTHO, or an AFFILIATE from the sale for commercial use of LICENSED PRODUCTS

to independent third parties less the following amounts included in the billed amount: (i) discounts, including cash discounts, or rebates actually allowed or granted from the billed amount, (ii) credits or allowances actually granted upon claims or returns regardless of the party requesting the return, (iii) freight charges paid for delivery, and (iv) taxes or other government charges levied on or measured by the billed amount whether absorbed by the billing or the billed party and not K-A. In the event that LICENSED PRODUCTS are sold in the form of a combination product containing one or more active ingredients, other than EPO, NET SALES for such combination products will be calculated by multiplying actual NET SALES of such LICENSED PRODUCTS by the fraction  $A/(A+B)$  where A is the invoice price of the LICENSED PRODUCT if sold separately and B is the total invoice price of any other active component or components in the combination if sold separately by ORTHO or a single AFFILIATE. If on a country-by-country basis the LICENSED PRODUCT and the other active component or components in the combination are not sold separately in said country by ORTHO or a single AFFILIATE, NET SALES for purposes of determining royalties on the combination shall be calculated by multiplying NET SALES of the combination by the fraction  $C/(C+D)$  where C is ORTHO's or AFFILIATE's total actual cost of LICENSED PRODUCT at the point of formulation into the combination product and D is ORTHO's or AFFILIATE's total actual cost of the other active ingredient(s) included in the combination product at such point.

1.16 "OUTSIDE RESEARCH PAYMENTS" shall mean amounts paid by ORTHO under the TECHNOLOGY LICENSE AGREEMENT or this AGREEMENT for clinical testing to an individual or individuals or to an entity other than K-A, ORTHO or an AFFILIATE for purposes of independent evaluation of any PRODUCT, which data shall be used by ORTHO and/or K-A in filing NDAs or other registrations regarding the PRODUCTS.

1.17 "PRODUCT ORGANISMS" shall mean any and all organisms developed or acquired by K-A, the uses of which are licensed to ORTHO pursuant to this AGREEMENT and which have been genetically engineered to produce biologically active LICENSED PRODUCTS, including any and all improvements thereon.

1.18 "PRODUCTS" shall mean EPO for human therapeutic uses including but not limited to prophylactic uses except diagnostics.

1.19 "TECHNOLOGY LICENSE AGREEMENT" shall mean an agreement between K-A and ORTHO executed on even date herewith.

1.20 "VALID LICENSED CLAIM" shall mean and include a claim in an issued LICENSED PATENT which has not lapsed or become abandoned and which claim has not been declared invalid by an unreversed or unappealable decision or judgment of a court of competent jurisdiction.

ARTICLE 2

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LICENSE

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2.01 GRANT

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K-A hereby grants to ORTHO but not AFFILIATES, except as hereinafter provided, an exclusive license to make in one location, have made and use LICENSED KNOW-HOW, LICENSED PATENTS and LICENSED PRODUCTS in the LICENSED TERRITORY in the LICENSED FIELD and to sell LICENSED PRODUCTS in the LICENSED TERRITORY in the LICENSED FIELD. ORTHO and AFFILIATES shall also be permitted to use and sell LICENSED PRODUCTS made in one location in the United States, in the LICENSED TERRITORY.

2.02 SUBLICENSE

-----

ORTHO may, with prior written notice to K-A, sublicense LICENSED PATENTS, LICENSED KNOW-HOW and LICENSED PRODUCTS under this AGREEMENT (i) to any AFFILIATE, or any third party, to use and sell LICENSED PRODUCTS as provided in this AGREEMENT; and (ii) if ORTHO is not manufacturing LICENSED PRODUCTS in the LICENSED TERRITORY, then to any one controlled (50%) AFFILIATE to make in one location in the LICENSED TERRITORY, use and sell LICENSED PRODUCTS as provided in this AGREEMENT.

2.03 ASSURANCE BY ORTHO

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In the event of sublicensing as provided in paragraph 2.02, ORTHO shall assure K-A that this AGREEMENT shall apply to

such AFFILIATE or third party sublicensee, and such AFFILIATE or third party sublicensee shall deliver to K-A a written promise to comply with the terms of this AGREEMENT to the extent that such terms are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities under this AGREEMENT as applied to such AFFILIATE or third party sublicensee.

2.04 DIRECT AGREEMENT  
-----

As a substitute for a sublicense, K-A shall, if ORTHO so requests, enter into a separate agreement with any AFFILIATE granting a license in accordance with the provisions of this AGREEMENT. Such agreement shall incorporate all of the terms of this AGREEMENT to the extent that they are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities by the AFFILIATE under such separate agreement.

2.05 WARRANTY  
-----

K-A warrants and represents that it has the full right and power to grant the license set forth in paragraph 2.01 of this Article 2 and that there are no outstanding agreements, assignments or encumbrances in existence inconsistent with the provisions of this AGREEMENT.

2.06 ORTHO EFFORTS  
-----

ORTHO agrees to use reasonable efforts to market and sell LICENSED PRODUCTS in the LICENSED TERRITORY. If K-A in good

faith, reasonably believes that the market for the LICENSED PRODUCT in one or more countries in the LICENSED TERRITORY is not being adequately penetrated by ORTHO (or its AFFILIATES or sublicensees), then K-A shall advise ORTHO in writing as to this belief, stating in reasonable detail the basis of such belief. Promptly thereafter, ORTHO and K-A shall meet in an atmosphere of reasonableness and good faith in order to mutually consider the development of revised marketing strategy for such country(ies). In the event that K-A makes a substantial contribution to a revised marketing plan or the identification and utilization of a new marketing entity, then the parties will consider in good faith an appropriate arrangement with respect to such country(ies) which would fairly recognize K-A's contribution.

2.07 IMPROVEMENTS

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2.07.1 If K-A, on the one hand, or ORTHO and/or its AFFILIATES and sublicensee(s), on the other hand, improve the PRODUCT ORGANISMS, and/or the LICENSED KNOW-HOW, or make LICENSED PRODUCTS or process improvements, all such improvements shall become part of the LICENSED KNOW-HOW and shall be promptly transferred and/or communicated to the other party in order to maintain parity among K-A, ORTHO and its AFFILIATES and sublicensees and by the provisions hereof shall be deemed to be a part of the LICENSED PATENTS or LICENSED KNOW-HOW as the case may be and licensed to K-A or ORTHO, as the case may be, on a royalty-free basis.

2.07.2 Notwithstanding any provision of this AGREEMENT, any technology and/or improvements developed by a party to this AGREEMENT and disclosed or licensed under this Article 2, shall be and remain the property of the developing party. This Paragraph 2.07.2 shall survive any termination of this AGREEMENT.

ARTICLE 3

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REGULATORY MATTERS

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3.01 PENDING NDA

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In the event, on the effective date of this AGREEMENT, an NDA approval letter from the FDA has not been received but an NDA or corresponding registration is pending in a MAJOR COUNTRY for any one or more of the PRODUCTS, this AGREEMENT takes effect and the process seeking said approval letter shall be diligently continued and pursued by the appropriate party as set forth in the TECHNOLOGY LICENSE AGREEMENT.

3.02 RECORDS AND PROGRESS.

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K-A, KIRIN and ORTHO shall keep and maintain complete and accurate records of all work including all FDA filings that either has done in connection with LICENSED PRODUCTS. The parties agree to provide each other with sufficient technical information and assistance as is necessary for each of them to assess the progress of the other party in its clinical testing of PRODUCTS and in its filing and pursuit of INDs and NDAs in connection with

LICENSED PRODUCTS including but not limited to K-A and KIRIN informing ORTHO of all communications and discussions with the FDA.

3.03 ACCESS TO FDA FILES

-----

K-A and ORTHO agree that each shall have access to and the exclusive and irrevocable right to refer to and cross-reference each other's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and the TECHNOLOGY LICENSE AGREEMENT and with respect to K-A not for any diagnostic purpose and each agrees to provide all appropriate documentation necessary to achieve the purposes of this AGREEMENT. ORTHO's access and utilization under this Paragraph shall include use within and outside the LICENSED TERRITORY. The parties agree to notify the FDA of the right to cross-reference the above-described documents and to execute and file all the necessary papers and documents required to allow each to exercise its rights under this AGREEMENT.

3.04 CONTINUING OBLIGATIONS

-----

During the term of this AGREEMENT, K-A, KIRIN and ORTHO each shall have a continuing obligation to advise each other of any adverse drug reactions or any governmental regulatory problems, notices, actions or communications and to keep all INDs, NDAs and supplements thereto current and in full force and effect relating to the manufacture, use, and/or sale of LICENSED PRODUCTS.

ARTICLE 4

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ROYALTIES

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4.01 PAYMENTS

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ORTHO shall pay to K-A royalties equal to ten (10) percent of NET SALES of LICENSED PRODUCTS in the LICENSED TERRITORY.

4.02 TIMING OF PAYMENTS

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For purposes of Paragraph 4.01, all computations of royalties due to K-A shall be made commencing on CLOSING and ending on December 31 of the year in which this AGREEMENT takes effect. Thereafter, all royalty payments due to K-A based on NET SALES shall be on a calendar quarterly basis and shall be payable by ORTHO within sixty (60) days of the end of each calendar quarter.

4.03 RECORDS

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ORTHO shall keep complete and accurate records of the latest three (3) years of NET SALES of LICENSED PRODUCTS with respect to which a royalty is payable according to this AGREEMENT. Within sixty (60) days following each quarterly period of a calendar year during which royalties are due under this AGREEMENT, ORTHO shall render to K-A a written report setting forth in reasonable detail the calculation of the amount of royalties due and payable on a country by country basis based on sales of such

LICENSED PRODUCTS during such calendar quarter, and ORTHO shall, upon rendering such report, remit to K-A the amount of royalties shown thereby to be due.

4.04 ACCOUNTING

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K-A shall have the right at its own expense to nominate an independent certified public accounting firm generally recognized as one of the so-called "Big 8" accounting firms or another independent certified public accountant acceptable to and approved by ORTHO, said approval not to be unreasonably withheld, who shall have access to the records of ORTHO and those of its AFFILIATES and Sublicensees during reasonable business hours for the purpose of verifying the underlying information and calculations relating to the payments as provided for in this AGREEMENT, but this right may not be exercised more than once in any one (1) calendar year, and said accountant shall disclose to K-A only information relating to the accuracy of the royalty report and the royalty payments made according to this AGREEMENT. ORTHO agrees to cooperate with an independent certified public accountant hereunder.

4.05 SALES TO AFFILIATES AND/OR SUBLICENSEES

-----

No royalties shall be payable on net sales of any LICENSED PRODUCT between ORTHO and any AFFILIATE or sublicensee.

4.06 PAYMENTS ON SALES  
-----

Any payments due hereunder on sales outside the United States by ORTHO shall be payable to K-A in United States Dollars at the prevailing rate of exchange of the currency of the country in which the sales are made (as quoted by the CITIBANK N.A. of New York for the last business day of the calendar quarter for which the royalties are payable).

4.07 AFFILIATE PAYMENTS  
-----

In the event that ORTHO grants a sublicense under this AGREEMENT to any AFFILIATE, or K-A enters into a separate Agreement with any AFFILIATE pursuant to Article 2, such AFFILIATE shall make any payments to K-A in accordance with the provisions of this AGREEMENT in United States Dollars at the prevailing rate of exchange of the currency of the country of such AFFILIATE on the date on which the royalty payment is due or in such other currency as both parties mutually agree upon.

4.08 TAXES  
-----

Any sum required under United States tax laws or the tax laws of any other country, to be withheld by ORTHO from payments for the account of K-A shall be promptly paid by ORTHO for and on behalf of K-A to the appropriate tax authorities, and ORTHO shall furnish K-A with official tax receipts or other appropriate evidence issued by the appropriate tax authorities sufficient to enable K-A to support a claim for income tax credit

in respect of any sum so withheld. This same provision shall also apply to an AFFILIATE sublicensed under Article 2 hereof or entering into a separate agreement pursuant to said Article with relation to the tax laws of the respective country or countries in which such AFFILIATE is doing business. If any tax, however denominated is levied against K-A solely because of the presence of an ORTHO facility or because ORTHO is doing business in a country, then ORTHO shall pay such tax.

4.09 EXCHANGE RATE NOT ASCERTAINABLE  
-----

During any period in which no exchange rate between the foreign currency in question and the United States Dollar can be ascertained in accordance with this Article, K-A shall have the option of having payment of such royalties suspended with the proviso that payment of amounts due shall be made within thirty (30) days after such a rate of exchange is next quoted by CITIBANK N.A. of New York; provided always that K-A may at any earlier date elect to receive payment in the foreign currency in question or in any other currency for which an exchange rate can be ascertained. If the exchange rate can be ascertained, but the payment by ORTHO's AFFILIATE to K-A in United States Dollars or other currency is not permissible, ORTHO's AFFILIATE may satisfy its obligations to K-A by the deposit in the currency of the country where the sales of LICENSED PRODUCTS were made on which the payment was based to the credit and account of K-A in any

commercial bank or trust company of its choice located in that country; prompt notice of which shall be given to K-A.

4.10 LATE PAYMENTS

-----

Royalty payments provided for in this AGREEMENT shall, when overdue or adjusted pursuant to Paragraph 4.04 above, be subject to a late payment charge calculated at the prime rate or successive prime rates publicly announced by CITIBANK N.A. of New York, New York during the entire period of delinquency; provided, however, that if the amount of such late payment charge exceeds the maximum permitted by law for such charge, such charge shall be reduced to such maximum amount.

ARTICLE 5

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SUPPLY AND MANUFACTURE

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5.01 ORTHO MANUFACTURE

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ORTHO shall have the right to manufacture in the United States its requirements of PRODUCTS for the sale of LICENSED PRODUCTS in the LICENSED TERRITORY and also shall have the right to sublicense said manufacture in accordance with the provisions of Paragraph 2.02. ORTHO's rights under this Paragraph shall not in any way be limited by any other provision of this AGREEMENT including but not limited to Paragraph 5.02.

5.02 K-A MANUFACTURE

-----

Promptly after execution of this AGREEMENT, ORTHO and K-A shall enter into discussions with respect to the manufacture and supply of PRODUCTS by K-A to ORTHO. Such discussions shall be conducted in an environment of reasonableness and good faith by the parties. If agreement is reached, the parties shall enter in an appropriate Manufacture and Supply Agreement. Such agreement shall include provisions relating to price, supply of PRODUCTS and PRODUCT ORGANISMS, disclosure of manufacturing technology, preparation and delivery of specifications, record keeping, renegotiation terms, aid and assistance to ORTHO to set up its own manufacturing facility, either within the United States or outside the United States, if required, duration and the like.

5.03 K-A's ASSISTANCE

-----

If ORTHO desires to establish a manufacturing facility for the manufacture of PRODUCTS in accordance with Paragraph 5.01, K-A shall diligently assist ORTHO in the establishment and start-up of said manufacturing facility, including providing ORTHO with manufacturing information reasonably sufficient for ORTHO to manufacture PRODUCTS. ORTHO shall reimburse K-A at its then-effective monthly billing rate for its efforts in assisting ORTHO in establishing said facility.

5.04 DELIVERY OF PRODUCT ORGANISMS

-----

K-A hereby warrants and represents that it shall faithfully and diligently deliver to any manufacturing facility

provided for in this Article 5 such quantities of PRODUCT ORGANISMS as are reasonably required by ORTHO, or its designated AFFILIATE, to manufacture LICENSED PRODUCTS. Such deliveries shall be made within thirty (30) days after written request by ORTHO to K-A at no expense to ORTHO, or its designated AFFILIATE, and shall be made by K-A from time to time during the term of this AGREEMENT as the need arises to replenish PRODUCT ORGANISMS.

ARTICLE 6

-----

CONFIDENTIALITY

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6.01 LIMITATIONS OF USAGE

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All confidential information transmitted by either party to the other including all confidential information developed pursuant to this AGREEMENT, shall be identified with reference to this AGREEMENT and the receiving party shall, while this AGREEMENT is in effect and for three (3) years after termination thereof, make no use of this information other than in furtherance of this AGREEMENT and shall use the same efforts to keep secret and prevent the disclosure of such information to parties other than its agents, officers, employees and representatives authorized to receive such information as it would its own confidential information except for such confidential information that,

(a) was known to the receiving party at the time of its disclosure and not previously subject to any obligation of confidentiality at the time of its disclosure;

(b) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(c) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this AGREEMENT; or

(d) became known to the receiving party after its disclosure (i) from a source other than the disclosing party (including from independent development by the receiving party), (ii) other than from a third party who had an obligation to the disclosing party not to disclose such information to others, and (iii) other than under an obligation of confidentiality.

Each receiving party may disclose any of the LICENSED KNOW-HOW and confidential information to the extent such disclosure is necessary to comply with applicable laws or regulations, or to make and use LICENSED PRODUCTS in accordance with the terms of this AGREEMENT.

ARTICLE 7

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PATENTS

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7.01 PROSECUTION AND MAINTENANCE

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K-A agrees to faithfully continue, at its expense, the prosecution of all patent applications listed in Exhibit B within the LICENSED FIELD and, when necessary, to file and prosecute additional applications covering patentable technology relating to EPO in the United States and other countries throughout the world. K-A shall have the duty and responsibility to pay all taxes and annuities on all applications and patents listed in Exhibit B within the LICENSED FIELD. K-A shall provide ORTHO with copies of all applications listed in Exhibit B within the LICENSED FIELD, all future-filed applications and all correspondence with Patent Offices applicable thereto. If K-A chooses not to prosecute and maintain certain applications/patents under this AGREEMENT, K-A shall so notify ORTHO and ORTHO shall, in its sole discretion, decide whether to assume the responsibility and expenses therefore for each such application or patent. In that event, the applications/patents for which ORTHO shall assume responsibility shall be assigned to ORTHO. If ORTHO so assumes responsibility, it shall be entitled to recover all its related reasonable expenses (including attorneys' fees) from the sale of LICENSED PRODUCTS in the country prior to any payments under Article 4 of this AGREEMENT.

7.02 REVIEW  
-----

K-A shall give ORTHO the opportunity to review, through their patent counsel, the status of all pending patent applications listed in Exhibit B and shall keep ORTHO informed of the status of their prosecution, including such Patent Office proceedings as interferences, reexamination, oppositions and requests for patent term extension under the Act. Notwithstanding the above, K-A shall have sole responsibility for all decisions in connection with the filing and prosecution of all patent applications and the maintenance of all patents. K-A and ORTHO shall each take all appropriate actions to maximize the benefits for both K-A and ORTHO with respect to any patent term restoration and/or regulatory exclusivity that may be available in connection with any LICENSED PATENT or LICENSED PRODUCT.

ARTICLE 8  
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ENFORCEMENT  
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8.01 INFRINGEMENT BY ORTHO  
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(i) If, as a result of the manufacture, use and sale of LICENSED PRODUCTS, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action by a third party, then ORTHO shall actively consult with K-A in its attempts to resolve same. If the settlement of a lawsuit or threatened lawsuit or other action requires any payments to a third party, then ORTHO and K-A shall share said payments on an equal basis.

(ii) If, as a result of the manufacture, use and sale of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action in a country and as a result of same ORTHO is prevented from the commencement of marketing said LICENSED PRODUCT in said country, then provided that LICENSED PRODUCTS are being marketed or in the future are marketed in another country or countries, ORTHO shall be entitled to recover the equivalent of 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with ARTICLE 4 of the TECHNOLOGY LICENSE AGREEMENT for registration in the problem country.

(iii) If, as a result of the manufacture, use and sale of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action in any country, and as a result of same, ORTHO is prevented from further marketing said PRODUCT in said country then if

(A) said PRODUCT has been on sale less than three (3) years in said country and provided that LICENSED PRODUCTS are being marketed or in the future are marketed in another country or countries, ORTHO shall be entitled to recover the equivalent of 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with ARTICLE 4 of the TECHNOLOGY LICENSE AGREEMENT for registration in the problem country.

(B) said PRODUCT has been on sale more than three (3) years in said country, there shall be no recovery by ORTHO under this Paragraph by ORTHO from K-A.

(iv) In connection with any lawsuit or threatened lawsuit or other action as set forth in (i), (ii) or (iii) above, ORTHO and K-A shall share on an equal basis all reasonable expenses (including attorneys' fees) incurred therewith.

8.02 INFRINGEMENT BY THIRD PARTIES  
-----

Either party shall promptly notify the other party of any infringement of any LICENSED PATENTS, misappropriation of a trade secret or declaration of an interference proceeding relating to LICENSED PATENTS or LICENSED KNOW-HOW, and shall provide the other party with all available evidence relating thereto. K-A and ORTHO shall then consult with each other as to the best manner in which to proceed. K-A shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If K-A requests ORTHO to join K-A in such suit or action and ORTHO agrees to do so, ORTHO shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. K-A shall pay ORTHO its reasonable expenses (including its attorney's fees) in connection with any such suit or action. Should K-A lack standing to bring any such action, then K-A may cause ORTHO to do so upon first undertaking to indemnify and hold ORTHO harmless (to

the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expense (including attorney fees) stemming therefrom. In the event K-A fails to take action with respect to such matters within a reasonable period, not more than six (6) months, following receipt of such notice and evidence, ORTHO shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If ORTHO finds it necessary to join K-A in such suit or action, K-A shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. ORTHO shall pay to K-A the reasonable expenses of K-A (including its attorney's fees) in connection with any such suit or action. Absent an agreement between the parties to jointly bring any action or suit hereunder and share the expenses thereof, any amount recovered in any such action or suit shall be retained by the party bearing its expenses thereof.

ARTICLE 9

-----  
TERM AND TERMINATION  
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9.01 TERM

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This AGREEMENT shall come into effect on the EFFECTIVE DATE and shall remain in effect unless the parties mutually agree in writing to terminate, or until termination occurs pursuant to Paragraph 9.02 below.

9.02 DEFAULT

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In the event that K-A or ORTHO (the "Defaulting party") shall:

a) default in a material obligation hereunder, including failure to make any payments, and fail to remedy such default within 60 days after notice of such default by the Non-Defaulting party; or

b) become bankrupt or insolvent, or file a petition in bankruptcy or make a general assignment for the benefit of creditors or otherwise acknowledge insolvency or be adjudged bankrupt; or

c) go or be placed in a process of complete liquidation or dissolution other than for an amalgamation or reconstruction; or

d) suffer the appointment of a receiver for any substantial portion of its business who shall not be discharged within 60 days after such receiver's appointment, then, and in any

such event, the Non-Defaulting party, at its option, may terminate its obligations to, and the rights of, the Defaulting party under the license granted in this AGREEMENT upon 30 days written notice to the Defaulting party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

9.03 RIGHTS UPON DEFAULT

-----  
(a) Upon termination of this AGREEMENT as a result of K-A's default under Paragraph 9.02, ORTHO shall have the right, but not the obligation, to make, use and sell LICENSED PRODUCTS under LICENSED PATENTS and LICENSED KNOW-HOW, and all of ORTHO's payment obligations under this AGREEMENT shall continue, provided however, that ORTHO shall have the right to off-set against any such payments any and all reasonable expenses directly incurred as a result of K-A's default.

(b) The grant of certain rights pursuant to this AGREEMENT involves unique rights which do not have a readily ascertainable fair market value. For this reason, among others, K-A might be irreparably damaged in the event that this AGREEMENT is not deemed to be specifically enforceable with respect to ORTHO's (and its AFFILIATES' and sublicensees') obligation of confidentiality and its covenant not to establish or sublicense more than one manufacturing facility in the LICENSED TERRITORY. As such, K-A shall be entitled to all equitable and/or legal remedies that

might be available to it solely for the purpose of enforcing the provisions of this Paragraph 9.03(b).

9.04 SURVIVAL  
-----

Notwithstanding the termination of a party's obligations to or the rights of the Defaulting party under this Agreement in accordance with the provisions of this Paragraph 9.03, and the provisions of Article 6, shall survive such termination and continue in full force and effect for a period of not more than three (3) years following termination.

9.05 EFFECT OF TERMINATION  
-----

Nothing herein shall limit any remedies available to either party at law or in equity for the default of the other party under Paragraph 9.02 (b), (c) or (d). Termination shall not excuse the obligation of either party to pay money due to the other party.

ARTICLE 10

MISCELLANEOUS PROVISIONS

10.01 NO INFRINGEMENT

K-A is not aware of (i) any third party rights upon which, in its opinion, this AGREEMENT will infringe, or (ii) any claimed infringement against K-A with respect to LICENSED PRODUCTS.

10.02 EFFORTS

The parties hereto shall use reasonable and practical efforts to obtain any and all consents, approvals, orders or authorizations required to be obtained with respect to the provisions hereof.

10.03 NOTICES

All notices, requests, demands and other communications required or permitted to be given under this AGREEMENT shall be in writing and shall be mailed to the party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return receipt requested, postage prepaid, and properly addressed as follows (in which case such notice shall be deemed to have been duly given on the third (3rd) day following the date of such sending):

KIRIN-AMGEN

-----

Kirin-Amgen, Inc.  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320-1789  
U.S.A.  
Telex No. 4994440 (K-A)  
Attn: Corporate Secretary

with a copy to:

Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 200  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701 357 (MPG LAW OD)  
Attn: Joel S. Marcus, Esq.

ORTHO

-----

President  
Ortho Pharmaceutical Corporation  
U.S. Route 202  
Raritan, New Jersey 08869  
U.S.A.

with a copy to:

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, N.J. 08933-7033  
U.S.A.  
Telex No. 844-481  
Attn: General Counsel

Any party by giving notice to the other in the manner provided above may change such party's address for purposes of this Paragraph 10.03.

10.04 ENTIRE AGREEMENT; AMENDMENT

-----

This AGREEMENT (together with all Exhibits attached hereto) constitutes the full and complete agreement and

understanding between the parties hereto and shall supersede any and all prior written and oral agreements including but not limited to any "Agreement in Principle" concerning the subject matter contained herein. This AGREEMENT may not be modified or amended nor may any provision hereof be waived without a written instrument executed by K-A and ORTHO.

10.05 WAIVER

-----

No failure or delay by any party to insist upon the strict performance of any term, condition, covenant or agreement of this AGREEMENT, or to exercise any right, power or remedy hereunder or consequent upon a breach hereof shall constitute a waiver of any such term, condition, covenant, agreement, right, power or remedy or of any such breach or preclude such party from exercising any such right, power or remedy at any later time or times.

10.06 HEADINGS

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Headings in this AGREEMENT are included herein for the convenience of reference only and shall not constitute a part of this AGREEMENT for any purpose.

10.07 ARBITRATION AND ATTORNEYS' FEES AND COSTS

-----

In the event any dispute should arise between the parties hereto as to the validity, construction, enforceability or performance of this AGREEMENT or any of its provisions, such

dispute shall be settled by arbitration. Said arbitration shall be conducted at Chicago, Illinois, in accordance with the rules then obtaining of the American Arbitration Association with a panel of three (3) arbitrators. The rules of discovery then pertaining to the courts of law in such jurisdiction shall apply thereto. The unsuccessful party to such arbitration shall pay to the successful party all costs and expenses, including reasonable attorneys' fees incurred therein by such successful party.

10.8 GOVERNING LAW  
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This AGREEMENT shall be construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in that state.

10.9 BINDING EFFECT  
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This AGREEMENT shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns.

10.10 NUMBER AND GENDER  
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Words in the singular shall include the plural, and words in a particular gender shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.11 COUNTERPARTS

-----

This AGREEMENT may be executed in one or more counterparts by the parties hereto. All counterparts shall be construed together and shall constitute one AGREEMENT.

10.12 AGREEMENT TO PERFORM NECESSARY ACTS

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Each party agrees to perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary or desirable to carry out the provisions of this AGREEMENT.

10.13 VALIDITY

-----

If for any reason any clause or provision of this AGREEMENT, or the application of any such clause or provision in a particular context or to a particular situation, circumstance or person, should be held unenforceable, invalid or in violation of law by any court or other tribunal, then the application of such clause or provision in contexts or to situations, circumstances or persons other than that in or to which it is held unenforceable, invalid or in violation of law shall not be affected thereby, and the remaining clauses and provisions hereof shall nevertheless remain in full force and effect, provided however, that any provisions so held unenforceable, invalid or in violation of law shall be rewritten by the parties in a lawful manner to reflect its intent.

10.14 REPRESENTATIONS  
-----

Each of the party hereto acknowledges and agrees (i) that no representation or promise not expressly contained in this AGREEMENT has been made by the other party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this AGREEMENT is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this AGREEMENT; and (iii) that each party has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this AGREEMENT.

10.15 ASSIGNMENT  
-----

Neither party shall assign its rights or obligations under this AGREEMENT without prior written consent of the other party, provided however, ORTHO may assign its rights and obligations by sublicensing its AFFILIATES or third parties as provided in Paragraph 2.02 hereinabove.

10.16 INDEPENDENT CONTRACTORS  
-----

K-A and ORTHO shall not be deemed to be partners, joint venturers or each other's agents, and neither shall have the right to act on behalf of the other except as expressly provided hereunder or otherwise expressly agreed to in writing.

10.17 FORCE MAJEURE

-----

Neither party shall be liable for failure to perform as required by any provision of this AGREEMENT where such failure results from a force majeure beyond such party's control. In the event of any delay attributable to a force majeure, the time for performance affected thereby shall be extended for a period equal to the time lost by reason of the delay. If, as a result of a force majeure, K-A is unable to manufacture LICENSED PRODUCTS, for the purposes of this AGREEMENT, and strictly in accordance with the provisions of Paragraphs 2.01 and 2.02 of this AGREEMENT, then, ORTHO shall have the right, but not the obligation, to manufacture said LICENSED PRODUCTS and K-A shall provide ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such LICENSED PRODUCTS.

10.18 INDEMNITY

-----

Each party to this AGREEMENT shall be responsible for its own acts relating to the manufacture and use of LICENSED PRODUCTS and neither shall indemnify the other for costs, expenses, liability, damages and claims for any injury or death to persons or damage to or destruction of property or other loss arising out of or in connection with any LICENSED PRODUCTS made or used by either party.

10.19 PUBLICITY AND DISCLOSURE  
-----

In the absence of specific agreement between the parties, neither party shall originate any publicity, news release or other public announcement, written or oral, whether to the public press, to stockholders or otherwise, relating to this AGREEMENT, to any amendment hereto as to performance hereunder, save only such announcement as in the opinion of legal counsel to the party making such announcement is required by law or practice to be made. The party making any such announcement shall give the other party an opportunity to review the form of the announcement before it is made. Routine references to this AGREEMENT and the arrangements hereunder without undue frequency and without emphasis shall be allowed in the usual course of business provided that notice of such use is given to the other party. If, in the opinion of ORTHO, excessive use occurs, such references shall be discontinued after discussion among the parties.

10.20 COSTS AND EXPENSES  
-----

K-A and ORTHO shall each bear and pay for their respective costs and expenses regarding the negotiation and preparation of this AGREEMENT and all documents, instruments and agreements related thereto.

10.21 EXPORT CONTROL LAWS  
-----

10.21.1 The parties hereby agree that any Technical Data (as that term is defined in Section 379.1 of the U.S. Export

Administration Regulations) exported from the United States pursuant to this AGREEMENT and any other related agreements, and any direct product thereof, shall not be shipped, either directly or indirectly, to Afghanistan or any Group P, Q, S, W, Y or Z Countries (as specified in Supplement No. 1 to part 370 of the Export Administration Regulations), unless (i) separate specific authorization to reexport such Technical Data or such direct products is provided by the U.S. Office of Export Administration or (ii) such specific authorization is not required pursuant to part 379.8 of the U.S. Export Administration Regulations. The parties further agree that the export and reexport of commodities pursuant to this AGREEMENT and any other related agreements shall be subject to the licensing requirements of the U.S. Export Regulations.

10.21.2 In the event that a specific authorization of, or a validated license from, a government other than that of the exporting party is required, K-A and ORTHO each agree that the party within the jurisdiction of such other government shall, upon the request of the party proposing to make the export, use reasonable efforts to obtain, as expeditiously as applicable, the requisite authorization or license.

10.22 PATENT MARKING

-----

ORTHO shall mark or cause to be marked all LICENSED PRODUCTS sold under this AGREEMENT, in accordance with any applicable laws and regulations.

IN WITNESS WHEREOF, the undersigned have caused this AGREEMENT to be executed by their duly authorized representatives in the manner legally binding upon them on the first date written above.

KIRIN-AMGEN, INC.  
a California corporation

/s/Robert D. Weist  
-----  
Witness

By /s/George B. Rathmann  
-----  
George B. Rathmann, President

ORTHO PHARMACEUTICAL CORPORATION  
a New Jersey corporation

/s/Dennis N. Longstreet  
-----  
Witness

By /s/Gary V. Parlin  
-----  
Gary V. Parlin, President

EXHIBIT A  
-----

DESCRIPTION OF ERYTHROPOIETIN  
-----

The chemical structure of r-HuEPO is best described by its amino acid sequence which is depicted below:

NH\2\ - ala pro pro arg leu ile cys asp ser arg val leu glu arg try  
  
  Y\*  
leu leu glu ala lys glu ala glu asn ile thr thr gly cys ala  
  
  Y  
glu his cys ser leu asn glu asn ile thr val pro asp thr lys  
val asn phe tyr ala trp lys arg met glu val gly gln gln ala  
val glu val trp gln gly leu ala leu leu ser glu ala val leu  
  
  Y  
arg gly gln ala leu leu val asn ser ser gln pro trp glu pro  
leu gln leu his val asp lys ala val ser gly leu arg ser leu  
thr thr leu leu arg ala leu gly ala gln lys glu ala ile ser  
pro pro asp ala ala ser ala ala pro leu arg thr ile thr ala  
asp thr phe arg lys leu phe arg val tyr ser asn phe leu arg  
gly lys leu lys leu tyr thr gly glu ala cys arg thr gly asp  
arg - COOH

\* 'Y' designates N-linked glycosalation site.

Exhibit B

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ERYTHROPOIETIN (Page 1)

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
155	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	561,024	12/13/83
155-CIP-1	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	582,185	2/21/84
155-CIP-2	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	655,841	9/28/84
155-CIP-3	F. Lin	Production of Erythropoietin	U.S.	675,298	11/30/84
		EPO	Australia	Via PCT US84/02021	12/11/84
			China	85106196	6/19/85
			Canada	469,938	12/12/84
			Czechoslovakia	PV 4438-85	6/18/85
			designating	84308654.7	12/12/84
			Austria		
			Belgium		
			France		
			Germany		
			Italy		
			Luxembourg		
			Netherlands		
			Sweden		
			Switzerland		
			Lichtenstein		
			United Kingdom		

\* Information not yet available.

Exhibit B

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ERYTHROPOIETIN (Page 2)

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
			Finland	852,377	6/14/85
			Denmark	Via PCT US84/0201	12/11/84
			E. Germany	G/277534-2	6/19/85
			Greece	*	*
			Hungary	2404/85	6/18/85
			Israel	73785	12/11/84
			Japan	Via PCT US84/02021	12/11/84
			Korea	7923/1984	12/13/84
			New Zealand	201,501	12/10/84
			Portugal	*	*
			South Africa	84/9625	12/11/84
			Spain	538,519	12/12/84
			USSR	3917560/04	6/19/85

\* Information not yet available.

Exhibit B

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ERYTHROPOIETIN (Page 3)

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
132	J. Egrie	ATCC HB8209 - Its Monoclonal Antibody to Erythropoietin ATCC HB8209/Budapest	U.S.	463,724	2/4/83
			Canada	446,767	2/3/84
			Israel	71001	2/17/84
			Japan	Via PCT US84/00151	2/3/84
		EPO	designating	84/300693.3	2/3/84
			Austria		
			Belgium		
			France		
			Germany		
			Italy		
			Luxembourg		
			Netherlands		
			Sweden		
			Switzerland		
			Liechtenstein		
			United Kingdom		
190	P. Lai T. Strickland	Protein Purification	U.S.	747,119	6/20/85

\* Information not yet available.

9-30-85 (K-A)  
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TECHNOLOGY LICENSE AGREEMENT  
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THIS TECHNOLOGY LICENSE AGREEMENT entered into this 30th day of September, 1985, by and between KIRIN-AMGEN INC., a California corporation having offices at 1900 Oak Terrace Lane, Thousand Oaks, California 91320-1789 (said corporation hereinafter referred to as "K-A") and ORTHO PHARMACEUTICAL CORPORATION, a New Jersey corporation having offices at U.S. Route 202, Raritan, New Jersey 08869, (said corporation hereinafter referred to as "ORTHO").

WITNESSETH:  
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WHEREAS, K-A represents that it has developed and is continuing to develop technology relating to erythropoietin and processes for its manufacture;

WHEREAS, K-A further represents that it is the owner or licensee of patent applications by assignment and unpatented know-how covering said erythropoietin;

WHEREAS, ORTHO and AFFILIATES are engaged in the research, development and sale of health care products throughout the world and wish to obtain certain rights to such technology and to such patents and patent applications;

WHEREAS, K-A is a joint venture between Amgen of Thousand Oaks, California and Kirin Brewery Co., Ltd. of Tokyo, Japan and each, respectively, has consented to the execution of this AGREEMENT and a Product License Agreement and each has by separate written undertaking to ORTHO effective September 30, 1985, and incorporated herein by reference, agreed: (a) that each will make available to K-A all information and documents and provide assistance in order that K-A perform all of its obligations hereunder including but not limited to providing to ORTHO all information and documents provided for under this AGREEMENT; (b) that each has consented to ORTHO having the right to manufacture EPO in the United States for use and sale outside the United States except in China and Japan; and (c) that in the event K-A is dissolved, each shall, to the extent legally possible, continue to fulfill all obligations and duties under this AGREEMENT.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein recited, and other good and valuable considerations, the receipt of which is acknowledged, it is agreed as follows:

ARTICLE 1

DEFINITIONS

For the purposes of this Agreement, the terms set forth in this Article I shall have the following meanings:

1.01 "ACT" shall mean the Drug Price Competition and Patent Term Restoration Act of 1984 and equivalent subsequent legislation in the United States and in any foreign country.

1.02 "AFFILIATE" shall mean and include (i) any company which owns or controls directly or indirectly at least forty percent (40%) of the voting stock of ORTHO and (ii) any other company at least forty percent (40%) of whose voting stock is owned or controlled directly or indirectly by such owning or controlling company, and (iii) any other company with which ORTHO or such an owning, owned, controlling or controlled company has a co-marketing, joint venture or distribution agreement for pharmaceuticals outside the United States. The term "ORTH0" shall also mean and include any AFFILIATE wherein the inclusion of same shall be warranted under the provisions of the AGREEMENT.

1.03 "AGREEMENT" shall mean this Technology License Agreement.

1.04 "CLOSING" shall occur when, :

(a) K-A shall execute and deliver to ORTHO this AGREEMENT and a Product License Agreement to market LICENSED PRODUCTS;

(b) ORTHO shall execute and deliver to K-A this AGREEMENT and a Product License Agreement and shall further deliver, as provided in Paragraph 5.01(i), to K-A the amount of \$2,500,000 in the form of a certified or cashier's check, representing an aggregate initial royalty payment;

(c) The following approvals shall have been obtained: (i) the Board of Directors of K-A shall have authorized K-A's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and a Product License Agreement; and (ii) the Board of Directors of ORTHO shall authorize ORTHO's participation in, and its execution and delivery of, this AGREEMENT, including the Exhibits attached hereto and a Product License Agreement.

1.05 "EFFECTIVE DATE" shall mean the date on which this AGREEMENT takes effect which is the date first written above.

1.06 "EPO" shall mean erythropoietin as described in Exhibit A.

1.07 "FIELD OF ACTIVITY" shall mean the areas of research, development, and regulatory approval of EPO for all

human therapeutic uses including but not limited to prophylactic uses, except diagnostics and shall include but not be limited to, toxicology, dosage studies, model studies, clinical studies, product registration and government approvals.

1.08 "FDA" shall mean the United States Food & Drug Administration and foreign counterparts thereof.

1.09 "IND" shall mean a Notice of Claimed Investigational Exemption for a New Drug and all supplements under the United States Food, Drug & Cosmetic Act (FDA Act) and foreign counterparts thereof.

1.10 "LICENSED FIELD" shall mean and include EPO for all indications for human use except diagnostics.

1.11 "LICENSED KNOW-HOW" shall mean and include any and all data, information, technology or special ability on the part of K-A including, but not limited to, processes, techniques, methods, products, materials and compositions relating to the research, development, manufacture, testing or use of EPO now owned or controlled by K-A or that shall be owned or controlled by K-A during the term of this AGREEMENT, which is reasonably related to LICENSED PATENTS and LICENSED

PRODUCTS for use in the LICENSED FIELD; and which is useful in seeking approval from appropriate governmental health authorities to market LICENSED PRODUCTS and which includes any K-A INDs and NDAs and all supplements thereto and foreign counterparts thereof covering PRODUCTS in the LICENSED FIELD.

1.12 "LICENSED PATENTS" shall mean:

(a) any patent listed in Exhibit B;

(b) any patent application listed in Exhibit B, and any division, continuation, or continuation-in-part of any such application, and any patent which shall issue based on such application, division, continuation or continuation-in-part;

(c) any patent which is a reissue or extension of or a patent of addition to, any patent defined in (a) or any application maturing into a patent defined in (b) above;

(d) any patent application or patent corresponding to any patent application or patent identified in (a), (b) or (c) above which is hereafter filed or issued in any country; and

(e) any patent application related to or based on any of K-A's technical information developed in the LICENSED FIELD during the performance of this AGREEMENT, and any division, continuation or continuation-in-part of any such application; and any patent which shall issue based on such

application, division, continuation or continuation-in-part; and any patent which is a reissue or extension of, or a patent of addition to, any such patent.

1.13 "LICENSED PRODUCTS" shall mean and include any PRODUCTS for use in the LICENSED FIELD (i) which are within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (ii) whose use is within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iii) which are manufactured or packaged within the scope of a VALID LICENSED CLAIM of a LICENSED PATENT; or (iv) which utilize any LICENSED KNOW-HOW.

1.14 "LICENSED TERRITORY" shall mean and include the entire world except (a) the United States, its territories and possessions, including the Commonwealth of Puerto Rico, (b) China and (c) Japan.

1.15 "MAJOR COUNTRY" shall mean any of the following: United States, United Kingdom, West Germany, France and Japan.

1.16 "NDA" shall mean a New Drug Application and/or a Product License Application and all supplements filed pursuant to the requirements of the FDA, including all documents, data and other information concerning LICENSED PRODUCTS which are necessary for, or included in, FDA

approval to market LICENSED PRODUCTS and foreign counterparts thereof of NDAs.

1.17 "OUTSIDE RESEARCH PAYMENTS" shall mean amounts paid by ORTHO for clinical testing to an individual or individuals or to an entity other than K-A or ORTHO or an AFFILIATE for purposes of independent evaluation of any of the PRODUCTS, which data shall be used by ORTHO and/or K-A in filing NDAs or other registrations regarding the PRODUCTS.

1.18 "PHASE I" shall mean that portion of the NDA approval process which provides for the first introduction into man (when only animal and in vitro data are available) of a LICENSED PRODUCT with the purpose of determining human toxicity, metabolism, absorption, elimination and other pharmacological action, preferred routes of administration and safe dosage range.

1.19 "PHASE II" shall mean that portion of the NDA approval process which provides for the initial trials of a LICENSED PRODUCT on a limited number of patients for specific disease control or prophylaxis purposes. PHASES I and II may overlap and, when indicated, may require additional animal data before they can be completed. Such animal tests are required to be designed to take into account the expected

duration of administration of LICENSED PRODUCTS to human beings, the age groups, and physical status.

1.20 "PRODUCTS" shall mean EPO for human therapeutic uses including but not limited to prophylactic uses except diagnostics.

1.21 "PRODUCT ORGANISMS" shall mean and include any and all organisms developed or acquired by K-A, the uses of which are licensed to ORTHO pursuant to this AGREEMENT and which have been genetically engineered to produce biologically active LICENSED PRODUCTS, including any and all improvements thereon.

1.22 "VALID LICENSED CLAIM" shall mean and include a claim in an issued LICENSED PATENT which has not lapsed or become abandoned and which claim has not been declared invalid by an unreversed or unappealable decision or judgment of a court of competent jurisdiction.

ARTICLE 2

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LICENSE

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2.01 GRANT

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K-A hereby grants to ORTHO but not AFFILIATES, except as hereinafter provided, an exclusive license to make

in one location, have made, and use LICENSED KNOW-HOW, LICENSED PATENTS and LICENSED PRODUCTS in the LICENSED TERRITORY in the LICENSED FIELD for use in research and in the development and regulatory approval of LICENSED PRODUCTS. ORTHO and AFFILIATES shall also be permitted to use LICENSED PRODUCTS made in one location in the United States, in the LICENSED TERRITORY.

2.02 SUBLICENSE  
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ORTHO may, with prior written notice to K-A, sublicense LICENSED PATENTS, LICENSED KNOW-HOW and LICENSED PRODUCTS under this AGREEMENT (i) to any AFFILIATE or third party, to use LICENSED PRODUCTS as provided in this AGREEMENT; and (ii) if ORTHO is not manufacturing LICENSED PRODUCTS in the LICENSED TERRITORY, then to any one controlled (50%) AFFILIATE to make in one location in the LICENSED TERRITORY and use LICENSED PRODUCTS as provided in this AGREEMENT.

2.03 ASSURANCE BY ORTHO  
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In the event of sublicensing as in Paragraph 2.02, ORTHO shall assure K-A that this AGREEMENT shall apply to such AFFILIATE or third party sublicensee, and such AFFILIATE or third party sublicensee shall deliver to K-A a written promise to comply with the terms of this AGREEMENT to the

extent that such terms are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities under this AGREEMENT as applied to such AFFILIATE or third party sublicensee.

2.04 DIRECT AGREEMENT

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As a substitute for a sublicense, K-A shall, if ORTHO so requests, enter into a separate agreement with any AFFILIATE of ORTHO granting a license in accordance with the provisions of this AGREEMENT. Such agreement shall incorporate all of the terms of this AGREEMENT to the extent that they are applicable. ORTHO shall guarantee the due and punctual performance of any and all responsibilities by the AFFILIATE under such separate agreement.

2.05 WARRANTY

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K-A warrants and represents that it has the full right and power to grant the license set forth in Paragraph 2.01 of this Article 2 and that there are no outstanding agreements, assignments or encumbrances in existence inconsistent with the provisions of this AGREEMENT.

ARTICLE 3

RESEARCH & DEVELOPMENT ACTIVITY

3.01 DEVELOPMENT PROGRAM.

K-A and ORTHO hereby agree to conduct a Development Program, as set forth below.

(a) K-A and ORTHO shall meet promptly, after execution of the AGREEMENT, to formulate an outline of research and development activities which shall be conducted by K-A until the formulation of a Development Plan. Within ninety (90) days after execution of this AGREEMENT, the parties shall establish a detailed development plan for the Development Program ("Development Plan"). The Development Plan shall: (i) identify the technical problems involved and the general projects to be carried out regarding the PRODUCTS, (ii) estimate the personnel to be contributed by K-A and ORTHO for each project, and (iii) set forth a projected timetable for the work, including clinical testing, to be performed by K-A and ORTHO. The Development Plan shall include a General Outline of both PHASE I and PHASE II, identifying the investigator or investigators, the hospitals or research facilities where the clinical pharmacology will be undertaken, any expert committees or panels to be utilized, the maximum number of subjects to be involved, and the estimated duration of these early phases of

investigation. K-A and ORTHO shall diligently conduct the projects set forth in the Development Plan and shall use reasonable efforts to reach the goals of the Development Program in their conduct of those projects. The parties shall prepare and supply to each other written reports of their respective progress under the Development Plan every three (3) months. The parties shall make appropriate revisions, if any, to the Development Plan every three (3) months.

(b) If any party desires, at any time, to modify the Development Plan, it shall notify the other party of the modification. Routine-type or minor modifications to the Development Plan may be accomplished by communicating same to the other party. Any major modification or amendment to the Development Plan shall be considered by both parties in good faith and be mutually agreed upon.

3.02 COMPENSATION.

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(a) Upon reasonable notice and request by ORTHO, K-A will assign a reasonable number of Scientists to work on the Development Program, for whose work K-A shall be reimbursed monthly at its then-effective normal monthly billing rate. For purposes of this AGREEMENT, the term "Scientist" shall include research scientists and research associates but shall exclude laboratory assistants.

(b) ORTHO shall pay for any contracted services identified in the Development Program within the LICENSED TERRITORY including, but not limited to, clinical studies and consultant services.

(c) At the end of each calendar month, K-A shall submit a written statement containing reasonable detail to ORTHO setting forth the number of Scientist-months of work that it performed during such calendar month and any other related outside expenditures. After ORTHO has received such a statement and has had a reasonable period, not to exceed thirty (30) days, to review it, ORTHO shall promptly pay K-A an amount equal to K-A's then-effective monthly billing rate times the Scientist-months involved in conducting projects under the Development Plan for such month. K-A shall notify ORTHO of any change in accordance with this paragraph in writing at least thirty (30) days in advance of the proposed change.

3.03 RECORDS OF COSTS.

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K-A shall keep correct and complete records containing all information required for the determination of costs to be paid to it under this AGREEMENT for a period of not less than three (3) years after the performance of any services hereunder. K-A shall permit the books and records that it keeps pursuant to this paragraph to be inspected and

audited during reasonable business hours by an independent certified public accountant selected by ORTHO, to the extent necessary to verify such costs. The parties hereby acknowledge that any work that is to be performed by K-A for ORTHO under the Development Program shall be as an independent contractor, and that ORTHO shall not incur any obligations for the remuneration or other expenses (and relevant reporting obligations) of any employee or representative of K-A by virtue of such employee's or representative's participation in the Development Program.

3.04 DISCLOSURE OF PRODUCT TECHNOLOGY.  
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(a) For purposes of advancing the Development Program, K-A and ORTHO shall disclose to each other any information, including such technology as may be characterized as inventive and appropriate for reduction to patent applications which shall be prepared and filed by the developing party's Patent Counsel and subsequently included in Exhibit B of this AGREEMENT, that each has relating to the FIELD OF ACTIVITY and which will be useful in furthering the goals of the Development Program. To further promote the purposes of the Development Program, each party shall actively collaborate with the other by disclosing on a regular and periodic basis, such technical, clinical and other information developed by such party that is pertinent

to the progress of the Development Program. K-A and ORTHO each acknowledge that any technical and other information disclosed under this Paragraph 3.04 shall be considered LICENSED KNOW-HOW and further agree that any such technical, clinical and other information shall not otherwise be disclosed except as permitted by this AGREEMENT.

(b) To facilitate further effective commercial development, and registration of the PRODUCTS within the FIELD OF ACTIVITY, K-A shall, within reason, permit representatives of ORTHO to inspect its respective facilities, technical reports, memoranda and other documents, including but not limited to laboratory notebooks, directly relating to the Development Program, and to make copies of any and all such reports, memoranda and other documents; provided, however, that the rights hereunder shall not extend beyond the LICENSED KNOW-HOW and shall be limited solely to information that has been actually used by K-A for the development of the PRODUCTS.

(c) Upon commencement of the Development Program, K-A agrees to supply ORTHO with sufficient technical information and assistance for ORTHO to be able to assess the progress of the work performed under the Development Plan during the course of the Development Program. Any technical information supplied by a party to the other hereunder shall

remain confidential and shall thereafter be deemed a part of the LICENSED KNOW-HOW for purposes hereof.

3.05 DISCLOSURE OF LICENSED KNOW-HOW

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K-A shall disclose to ORTHO on a continuing basis all such LICENSED KNOW-HOW including the contents of any K-A INDs and NDAs filed in Japan pursuant to the regulations of the FDA as is reasonably required for ORTHO to conduct PHASE I and PHASE II studies, clinical studies and obtain product registration of LICENSED PRODUCTS in the LICENSED TERRITORY. With respect to information for the manufacture of LICENSED PRODUCTS pursuant to this AGREEMENT not contained in INDs, K-A shall disclose same to ORTHO upon completion of PHASE II studies according to ORTHO's protocol. Additionally, K-A shall promptly provide ORTHO with sufficient information necessary to satisfactorily assess the progress of its work with respect to the development of LICENSED PRODUCTS. ORTHO shall also provide K-A with sufficient information necessary to enable K-A to satisfactorily assess the progress of ORTHO's clinical testing and LICENSED PRODUCTS registration work.

3.06 IMPROVEMENTS

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3.06.1 If K-A, on the one hand, or ORTHO and/or its AFFILIATES and sublicensee(s), on the other hand, improve the

PRODUCT ORGANISMS, and/or the LICENSED KNOW-HOW, or make LICENSED PRODUCTS or process improvements, all such improvements shall become part of the LICENSED KNOW-HOW and shall be promptly transferred and/or communicated to the other party in order to maintain parity among K-A, ORTHO and its AFFILIATES and sublicensees and by the provisions hereof shall be deemed to be a part of the LICENSED PATENTS or LICENSED KNOW-HOW as the case may be and licensed to K-A or ORTHO, as the case may be, on a royalty-free basis.

3.06.2 Notwithstanding any provision of this AGREEMENT, any technology and/or improvements developed by a party to this AGREEMENT and disclosed or licensed under this Article 3, shall be and remain the property of the developing party. This Paragraph 3.06.2 shall survive any termination of this AGREEMENT.

3.07 WARRANTY  
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K-A warrants that any vialled clinical PRODUCTS and/or PRODUCT ORGANISMS provided to ORTHO for use in accordance with the provisions of this AGREEMENT shall conform with the description and specifications set forth in the appropriate AMGEN IND in the United States or supplement thereof and shall be suitable for use as set forth in said IND. K-A expressly disclaims all other warranties, expressed

or implied, including without limitation warranties of merchantability or fitness for a particular purpose with respect to the vialled clinical PRODUCTS and/or PRODUCT ORGANISMS furnished by K-A to ORTHO hereunder.

ARTICLE 4  
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CLINICAL STUDIES AND REGISTRATION  
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4.01 EPO  
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K-A shall, as soon as practicable and at its own expense, conduct the necessary studies and testing and prepare and file an IND for EPO for dialysis and other indications in Japan and shall so advise ORTHO in writing and provide ORTHO with copies of all materials filed with the FDA. K-A shall, at its own expense, have the responsibility to comply, with respect to any IND filed by K-A, with any FDA request for all additional information and repetition of tests required by the FDA. K-A shall, at its own expense exert reasonable efforts to conduct toxicology and dosage studies, model studies and clinical studies with respect to dialysis and other indications and shall file an NDA in Japan if sufficient supporting data can be developed. ORTHO shall, at its own expense conduct toxicology and dosage studies, model studies and clinical studies for dialysis and for not less

than two (2) other indications and shall file appropriate NDAs or supplements if sufficient supporting data can be developed. ORTHO shall have the right to use such materials and any supporting data thereof for the filing of any registrations corresponding to K-A's INDs, NDAs and all supplements thereto, whether within or outside the LICENSED TERRITORY.

#### 4.02 ORTHO STUDIES

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ORTHO, at its sole cost and expense, shall use its reasonable efforts in the LICENSED TERRITORY to pursue the preclinical, clinical and other studies outlined in the Development Program. ORTHO shall keep and maintain complete and accurate records of all work that it does in connection with this AGREEMENT. These records shall be made available by ORTHO at reasonable times for examination at K-A's request. In addition, ORTHO shall provide K-A with sufficient technical information and assistance as is necessary for K-A to assess the progress of ORTHO in its clinical studies and registration. In connection with such clinical testing, K-A shall supply, at K-A's sole cost and expense, reasonable quantities of vialled clinical PRODUCTS ready for clinical use and sufficient for ORTHO to utilize for such purposes. If K-A is unable to supply one hundred (100) percent of ORTHO's needs for said clinical testing,

then ORTHO shall have the right, but not the obligation, to manufacture its needs and K-A shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to so manufacture. Notwithstanding the above, if K-A is unable to supply one hundred (100) percent of ORTHO's needs for said clinical testing, it shall provide to ORTHO at least fifty (50) percent of its manufacture of such vialled clinical PRODUCTS and shall not provide any of said PRODUCTS to any third party. If K-A is unable to so supply as a result of any applicable laws and regulations, then ORTHO shall have the right, but not the obligation to manufacture its needs of said PRODUCTS and K-A shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such PRODUCTS.

4.03 RECORDS AND PROGRESS.

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ORTHO and K-A shall keep and maintain complete and accurate records of all work including all FDA filings that either has done in connection with LICENSED PRODUCTS. The parties agree to provide each other with sufficient technical information and assistance as is necessary for each of them to assess the progress of the other party in its clinical testing of PRODUCTS and in its filing of INDs and NDAs in connection with such PRODUCTS including but not limited to K-A informing ORTHO of all communications and discussions with the FDA relating to its INDs.

#### 4.04 ACCESS TO FDA FILES

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K-A and ORTHO agree that each shall have access to and the exclusive and irrevocable right to refer to and cross-reference each other's INDs, NDAs and supplements thereto consistent with the purposes of this AGREEMENT and the Product License Agreement and with respect to K-A not for any diagnostic purpose and each agrees to provide all appropriate documentation necessary to achieve the purposes of this AGREEMENT. ORTHO's access and utilization under this Paragraph shall include use within and outside the LICENSED TERRITORY. The parties agree to notify the FDA of the right to cross-reference the above-described documents and to execute and file all the necessary papers and documents required to allow each to exercise its rights under this AGREEMENT.

#### 4.05 CONTINUING OBLIGATIONS

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During the term of this AGREEMENT, K-A and ORTHO each shall have a continuing obligation to advise each other of any adverse drug reactions or any governmental regulatory problems, notices, actions or communications and to keep all INDs, NDAs and supplements thereto current and in full force and effect relating to the manufacture or use, of LICENSED PRODUCTS.

ARTICLE 5

ROYALTY PAYMENTS

5.01 MILESTONE EVENTS AND ROYALTY PAYMENTS In accordance with the grant of

Paragraph 2.01, ORTHO shall make the following royalty payments to K-A at the following times in accordance with the occurrence of the following milestone events:

(i) \$2,500,000 - due and payable upon execution of this AGREEMENT as an aggregate initial royalty payment.

(ii) \$2,500,000 royalty payment due and payable upon commencement of PHASE II clinical studies.

(iii) \$2,500,000 royalty payment due and payable upon the initial filing of any MAJOR COUNTRY registration.

(iv) \$2,500,000 royalty payment due and payable upon the approval of any MAJOR COUNTRY registration.

5.02 PAYMENT DATES.

The milestone royalty payments set forth in Paragraph 5.01 shall each be due and payable to K-A by ORTHO thirty (30) days following the occurrence of the milestone events set forth in Paragraph 5.01.

ARTICLE 6

CONFIDENTIALITY

6.01 LIMITATIONS OF USAGE

All confidential information transmitted by either party to the other including all confidential information developed pursuant to this AGREEMENT, shall be identified with reference to this AGREEMENT and the receiving party shall, while this AGREEMENT is in effect and for three (3) years after termination thereof, make no use of this information other than in furtherance of this AGREEMENT and shall use the same efforts to keep secret and prevent the disclosure of such information to parties other than its agents, officers, employees and representatives authorized to receive such information as it would its own confidential information except for such confidential information that,

(a) was known to the receiving party at the time of its disclosure and not subject to any obligation of confidentiality at the time of its disclosure;

(b) was generally available to the public or was otherwise part of the public domain at the time of its disclosure;

(c) became generally available to the public or became otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving party in breach of this AGREEMENT; or

(d) became known to the receiving party after its disclosure (i) from a source other than the disclosing party (including from independent development by the receiving party), (ii) other than from a third party who had an obligation to the disclosing party not to disclose such information to others, and (iii) other than under an obligation of confidentiality.

Each receiving party may disclose any of the LICENSED KNOW-HOW and confidential information to the extent such disclosure is necessary to comply with applicable laws or regulations, or to make and use LICENSED PRODUCTS in accordance with the terms of this AGREEMENT.

ARTICLE 7

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PATENTS

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7.01 PROSECUTION AND MAINTENANCE

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K-A agrees to faithfully continue, at its expense, the prosecution of all patent applications listed in Exhibit B within the LICENSED FIELD and, when necessary, to file and prosecute additional applications covering patentable technology relating to EPO in the United States and other countries throughout the world. K-A shall have the duty and responsibility to pay all taxes and annuities on all applications and patents listed in Exhibit B of the

AGREEMENT. K-A shall provide ORTHO with copies of all applications listed in Exhibit B, all future-filed applications within the LICENSED FIELD and all correspondence with Patent Offices applicable thereto. If K-A chooses not to prosecute and maintain certain applications/patents under this AGREEMENT, K-A shall so notify ORTHO and ORTHO shall, in its sole discretion, decide whether to assume the responsibility and expenses therefore for each such application or patent. In that event, the applications/patents for which ORTHO shall assume responsibility shall be assigned to ORTHO.

7.02 REVIEW

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K-A shall give ORTHO the opportunity to review, through their patent counsel, the status of all pending patent applications listed in Exhibit B and shall keep ORTHO informed of the status of their prosecution, including such Patent Office proceedings as interferences, reexamination, oppositions and requests for patent term extension under the Act. Notwithstanding the above, K-A shall have sole responsibility for all decisions in connection with the filing and prosecution of all patent applications and the maintenance of all patents. K-A and ORTHO shall each take all appropriate actions to maximize the benefits for both K-A and ORTHO with respect to any patent term restoration and/or

regulatory exclusivity that may be available in connection with any LICENSED PATENT or LICENSED PRODUCT.

ARTICLE 8

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ENFORCEMENT

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8.01 INFRINGEMENT BY ORTHO

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(i) If, as a result of the manufacture and use of LICENSED PRODUCTS, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action by a third party, then ORTHO shall actively consult with K-A in its attempts to resolve same. If the settlement of a lawsuit or threatened lawsuit or other action requires any payments to a third party, then ORTHO and K-A shall share said payments on an equal basis.

(ii) If, as a result of the manufacture and use of any LICENSED PRODUCT, ORTHO is sued for patent infringement or threatened with such a lawsuit or other action in a country and as a result of same ORTHO is prevented from the commencement of marketing said LICENSED PRODUCT in said country, then provided that LICENSED PRODUCTS are being marketed or in the future are marketed in another country or countries, ORTHO shall be entitled to recover the equivalent of 50% of the OUTSIDE RESEARCH PAYMENTS directly related to the LICENSED PRODUCT incurred by ORTHO in accordance with

ARTICLE 4 of this AGREEMENT for registration in the problem country.

(iii) In connection with any lawsuit or threatened lawsuit or other action as set forth in (i) or (ii) above, ORTHO and K-A shall share on an equal basis all reasonable expenses (including attorneys' fees) incurred therewith.

8.02 INFRINGEMENT BY THIRD PARTIES  
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Either party shall promptly notify the other party of any infringement of any LICENSED PATENTS, misappropriation of a trade secret or declaration of an interference proceeding relating to LICENSED PATENTS or LICENSED KNOW-HOW, and shall provide the other party with all available evidence relating thereto. K-A and ORTHO shall then consult with each other as to the best manner in which to proceed. K-A shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If K-A requests ORTHO to join K-A in such suit or action and ORTHO agrees to do so, ORTHO shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. K-A shall pay ORTHO its reasonable expenses (including its attorney's fees) in connection with any such suit or action. Should K-A lack standing to bring any such action, then K-A may cause ORTHO

to do so upon first undertaking to indemnify and hold ORTHO harmless (to the extent permissible by law) from all consequent liability and to promptly reimburse all reasonable expense (including attorney fees) stemming therefrom. In the event K-A fails to take action with respect to such matters within a reasonable period, not more than six (6) months, following receipt of such notice and evidence, ORTHO shall have the right, but not the obligation, to bring, defend and maintain any appropriate suit or action. If ORTHO finds it necessary to join K-A in such suit or action, K-A shall execute all papers and perform such other acts as may be reasonably required and may, at its option, be represented by counsel of its choice. ORTHO shall pay to K-A the reasonable expenses of K-A (including its attorney's fees) in connection with any such suit or action. Absent an agreement between the parties to jointly bring any action or suit hereunder and share the expenses thereof, any amount recovered in any such action or suit shall be retained by the party bearing the expenses thereof.

ARTICLE 9

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TERM AND TERMINATION

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9.01 TERM

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This AGREEMENT shall come into effect on the EFFECTIVE DATE and shall terminate on the earlier of the

tenth (10th) year anniversary of the EFFECTIVE DATE or as to the LICENSED PRODUCT upon receipt of an approval letter on the LICENSED PRODUCT from the FDA, or the counterpart of said approval letter on a LICENSED PRODUCT in any MAJOR COUNTRY, whichever occurs first.

9.02 RIGHTS UPON TERMINATION  
-----

Upon termination of this AGREEMENT as provided for in Paragraph 9.01 above, all LICENSED PATENTS and LICENSED KNOW-HOW shall become the sole property of K-A, and ORTHO shall have no further rights thereto under this AGREEMENT. Any rights ORTHO might obtain with respect to LICENSED PATENTS and LICENSED KNOW-HOW shall be in accordance with the provisions of the Product License Agreement to market LICENSED PRODUCTS.

9.03 DEFAULT  
-----

In the event that K-A or ORTHO (the "Defaulting party") shall:

a) default in a material obligation hereunder, including failure to make any payments, and fail to remedy such default within 60 days after notice of such default by the Non-Defaulting party; or

b) become bankrupt or insolvent, or file a petition in bankruptcy or make a general assignment for the benefit of

creditors or otherwise acknowledge insolvency or be adjudged bankrupt; or

c) go or be placed in a process of complete liquidation or dissolution other than for an amalgamation or reconstruction; or

d) suffer the appointment of a receiver for any substantial portion of its business who shall not be discharged within 60 days after such receiver's appointment, then, and in any such event, the Non-Defaulting party, at its option, may terminate its obligations to, and the rights of, the Defaulting party under the license granted in this AGREEMENT upon 30 days written notice to the Defaulting party, which termination shall be effective as of the occurrence of the event giving rise to the option to terminate.

9.04 RIGHTS UPON DEFAULT  
-----

(a) Upon termination of this AGREEMENT as a result of K-A's default under Paragraph 9.03, ORTHO shall have the right, but not the obligation, to make, use and sell LICENSED PRODUCTS under LICENSED PATENTS and LICENSED KNOW-HOW, and all of ORTHO's payment obligations under this AGREEMENT shall continue, provided however, that ORTHO shall have the right to off-set against any such payments any and all reasonable expenses directly incurred as a result of K-A's default.

(b) The grant of certain rights pursuant to this AGREEMENT involves unique rights which do not have a readily ascertainable fair market value. For this reason, among others, K-A might be irreparably damaged in the event that this AGREEMENT is not deemed to be specifically enforceable with respect to ORTHO's (and its AFFILIATES' and Sublicensees') obligation of confidentiality and its covenant not to establish or sublicense more than one manufacturing facility in the LICENSED TERRITORY. As such, K-A shall be entitled to all equitable and/or legal remedies that might be available to it solely for the purpose of enforcing the provisions of this Paragraph 9.04(b).

9.05 SURVIVAL

-----

Notwithstanding the termination of a party's obligations to or the rights of the Defaulting party under this Agreement in accordance with the provisions of Paragraph 9.03, the provisions of Article 6 shall survive such termination and continue in full force and effect for a period of not more than three (3) years following termination.

9.06 EFFECT OF TERMINATION

-----

Nothing herein shall limit any remedies available to either party at law or in equity for the default of the other party under Paragraph 9.03(b), (c) or (d). Termination

shall not excuse the obligation of either party to pay money due to the other party.

ARTICLE 10

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MISCELLANEOUS PROVISIONS

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10.01 NO INFRINGEMENT

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K-A is not aware of (i) any third party rights upon which, in its opinion, this AGREEMENT will infringe, or (ii) any claimed infringement against K-A with respect to LICENSED PRODUCTS.

10.02 EFFORTS

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The parties hereto shall use reasonable and practical efforts to obtain any and all consents, approvals, orders or authorizations required to be obtained with respect to the provisions hereof.

10.03 NOTICES

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All notices, requests, demands and other communications required or permitted to be given under this AGREEMENT shall be in writing and shall be mailed to the party to whom notice is to be given, by telex or facsimile, and confirmed by first class mail, registered or certified, return receipt requested, postage prepaid, and properly

addressed as follows (in which case such notice shall be deemed to have been duly given on the third (3rd) day following the date of such sending):

K-A  
---

Kirin-Amgen Inc.  
1900 Oak Terrace Lane  
Thousand Oaks, CA 91320-1789  
U.S.A.  
Telex No. 4994440 (K-A)  
Attn: Corporate Secretary

with a copy to:

Musick, Peeler & Garrett  
One Wilshire Boulevard  
Suite 2000  
Los Angeles, CA 90017  
U.S.A.  
Telex No. 701 357 (MPG LAW OD)  
Attn: Joel S. Marcus, Esq.

ORTHO  
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President  
Ortho Pharmaceutical Corporation  
U.S. Route 202  
Raritan, New Jersey 08869  
U.S.A.

with a copy to:

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, N.J. 08933-7033  
U.S.A.  
Telex No. 844-481  
Attn: General Counsel

Any party by giving notice to the other in the manner provided above may change such party's address for purposes of this Paragraph 10.03.

10.04 ENTIRE AGREEMENT; AMENDMENT

-----

This AGREEMENT (together with all Exhibits attached hereto) constitutes the full and complete agreement and understanding between the parties hereto and shall supersede any and all prior written and oral agreements, including but not limited to any "Agreement in Principle", concerning the subject matter contained herein. This AGREEMENT may not be modified or amended nor may any provision hereof be waived without a written instrument executed by K-A and ORTHO.

10.05 WAIVER

-----

No failure or delay by any party to insist upon the strict performance of any term, condition, covenant or agreement of this AGREEMENT, or to exercise any right, power or remedy hereunder or consequent upon a breach hereof shall constitute a waiver of any such term, condition, covenant, agreement, right, power or remedy or of any such breach or preclude such party from exercising any such right, power or remedy at any later time or times .

10.06 HEADINGS

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Headings in this AGREEMENT are included herein for the convenience of reference only and shall not constitute a part of this AGREEMENT for any purpose.

10.07 ARBITRATION AND ATTORNEYS' FEES AND COSTS  
-----

In the event any dispute should arise between the parties hereto as to the validity, construction, enforceability or performance of this AGREEMENT or any of its provisions, such dispute shall be settled by arbitration. Said arbitration shall be conducted at Chicago, Illinois, in accordance with the rules then obtaining of the American Arbitration Association with a panel of three (3) arbitrators. The rules of discovery then pertaining to the courts of law in such jurisdiction shall apply thereto. The unsuccessful party to such arbitration shall pay to the successful party all costs and expenses, including reasonable attorneys' fees incurred therein by such successful party.

10.8 GOVERNING LAW  
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This AGREEMENT shall be construed in accordance with the internal laws, and not the law of conflicts, of the State of California applicable to agreements made and to be performed in that state.

10.9 BINDING EFFECT  
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This AGREEMENT shall be binding upon and inure to the benefit of the parties hereto, their successors and assigns.

10.10 NUMBER AND GENDER  
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Words in the singular shall include the plural, and words in a particular gender shall include either or both additional genders, when the context in which such words are used indicates that such is the intent.

10.11 COUNTERPARTS  
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This AGREEMENT may be executed in one or more counterparts by the parties hereto. All counterparts shall be construed together and shall constitute one AGREEMENT.

10.12 AGREEMENT TO PERFORM NECESSARY ACTS  
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Each party agrees to perform any further acts and execute and deliver any and all further documents and/or instruments which may be reasonably necessary or desirable to carry out the provisions of this AGREEMENT.

10.13 VALIDITY  
-----

If for any reason any clause or provision of this AGREEMENT, or the application of any such clause or provision in a particular context or to a particular situation, circumstance or person, should be held unenforceable, invalid or in violation of law by any court or other tribunal, then the application of such clause or provision in contexts or to situations, circumstances or persons other than that in or to

which it is held unenforceable, invalid or in violation of law shall not be affected thereby, and the remaining clauses and provisions hereof shall nevertheless remain in full force and effect, provided however, that any provisions so held unenforceable, invalid or in violation of law shall be rewritten by the parties in a lawful manner to reflect its intent.

10.14 REPRESENTATIONS  
-----

Each of the parties hereto acknowledges and agrees (i) that no representation or promise not expressly contained in this AGREEMENT has been made by the other party hereto or by any of its agents, employees, representatives or attorneys; (ii) that this AGREEMENT is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this AGREEMENT; and (iii) that each party has had the opportunity to be represented by counsel of its own choice in this matter, including the negotiations which preceded the execution of this AGREEMENT.

10.15 ASSIGNMENT  
-----

Neither party shall assign its rights or obligations under this AGREEMENT without prior written consent of the other party, provided however, ORTHO may

assign its rights and obligations by sublicensing its AFFILIATES or third parties as provided in Paragraph 2.02 hereinabove.

10.16 INDEPENDENT CONTRACTORS

-----

K-A and ORTHO shall not be deemed to be partners, joint venturers or each other's agents, and neither shall have the right to act on behalf of the other except as expressly provided hereunder or otherwise expressly agreed to in writing.

10.17 FORCE MAJEURE

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Neither party shall be liable for failure to perform as required by any provision of this AGREEMENT where such failure results from a force majeure beyond such party's control. In the event of any delay attributable to a force majeure, the time for performance affected thereby shall be extended for a period equal to the time lost by reason of the delay. If, as a result of a force majeure, K-A is unable to manufacture LICENSED PRODUCTS, then, for the purposes of this AGREEMENT and strictly in accordance with the provisions of Paragraphs 2.01 and 2.02 of this AGREEMENT, ORTHO shall have the right, but not the obligation, to manufacture said LICENSED PRODUCTS and K-A shall provide to ORTHO any assistance, information and/or know-how required by ORTHO to manufacture such LICENSED PRODUCTS.

10.18 INDEMNITY  
-----

Each party to this AGREEMENT shall be responsible for its own acts relating to the manufacture and use of LICENSED PRODUCTS and neither shall indemnify the other for costs, expenses, liability, damages and claims for any injury or death to persons or damage to or destruction of property or other loss arising out of or in connection with any LICENSED PRODUCTS made or used by either party.

10.19 PUBLICITY AND DISCLOSURE  
-----

In the absence of specific agreement between the parties, neither party shall originate any publicity, news release or other public announcement, written or oral, whether to the public press, to stockholders or otherwise, relating to this AGREEMENT, to any amendment hereto as to performance hereunder, save only such announcement as in the opinion of legal counsel to the party making such announcement is required by law or practice to be made. The party making any such announcement shall give the other party an opportunity to review the form of the announcement before it is made. Routine reference to this AGREEMENT and the arrangements hereunder without undue frequency and without emphasis shall be allowed in the usual course of business provided that notice of such use is given to the other party. If, in the opinion of ORTHO, excessive use occurs, such reference shall be discontinued after discussion among the parties.

10.20 COSTS AND EXPENSES  
-----

K-A and ORTHO shall each bear and pay for their respective costs and expenses regarding the negotiation and preparation of this AGREEMENT and all documents, instruments and agreements related thereto.

10.21 EXPORT CONTROL LAWS  
-----

10.21.1 The parties hereby agree that any Technical Data (as that term is defined in Section 379.1 of the U.S. Export Administration Regulations) exported from the United States pursuant to this AGREEMENT and any other related agreements, and any direct product thereof, shall not be shipped, either directly or indirectly, to Afghanistan or any Group P, Q, S, W, Y or Z Countries (as specified in Supplement No. 1 to part 370 of the Export Administration Regulations), unless (i) separate specific authorization to reexport such Technical Data or such direct products is provided by the U.S. Office of Export Administration or (ii) such specific authorization is not required pursuant to part 379.8 of the U.S. Export Administration Regulations. The parties further agree that the export and reexport of commodities pursuant to this AGREEMENT and any other related agreements shall be subject to the licensing requirements of the U.S. Export Regulations.

10.21.2 In the event that a specific authorization of, or a validated license from, a government other than that of the exporting party is required, K-A and ORTHO each agree that the party within the jurisdiction of such other government shall, upon the request of the party proposing to make the export, use reasonable efforts to obtain, as expeditiously as applicable, the requisite authorization or license.

IN WITNESS WHEREOF, the undersigned have caused this AGREEMENT to be executed by their duly authorized representatives in the manner legally binding upon them on the first date written above.

KIRIN-AMGEN INC.  
a California Corporation

/s/ Robert D. Weist

By /s/ George B. Rathmann

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Witness

George B. Rathmann, President

ORTHO PHARMACEUTICAL CORPORATION  
a New Jersey corporation

/s/ Dennis N. Longstreet

By /s/ Gary V. Parlin

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Witness

Gary V. Parlin, President

EXHIBIT A

-----  
DESCRIPTION OF ERYTHROPOIETIN  
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The chemical structure of r-HuEPO is best described by its amino acid sequence which is depicted below:

NH\2\ - ala pro pro arg leu ile cys asp ser arg val leu glu arg try  
  Y\*  
leu leu glu ala lys glu ala glu asn ile thr thr gly cys ala  
  
  Y  
glu his cys ser leu asn glu asn ile thr val pro asp thr lys  
val asn phe tyr ala trp lys arg met glu val gly gln gln ala  
val glu val trp gln gly leu ala leu leu ser glu ala val leu  
  
  Y  
arg gly gln ala leu leu val asn ser ser gln pro trp glu pro  
leu gln leu his val asp lys ala val ser gly leu arg ser leu  
thr thr leu leu arg ala leu gly ala gln lys glu ala ile ser  
pro pro asp ala ala ser ala ala pro leu arg thr ile thr ala  
asp thr phe arg lys leu phe arg val tyr ser asn phe leu arg  
gly lys leu lys leu tyr thr gly glu ala cys arg thr gly asp  
arg - COOH

\* 'Y' designates N-linked glycosalation site.

Exhibit B

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ERYTHROPOIETIN (Page 1)

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Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
155	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	561,024	12/13/83
155-CIP-1	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	582,185	2/21/84
155-CIP-2	F. Lin	Recombinant Methods and Materials Applied to Microbial Expression of Erythropoietin	U.S.	655,841	9/28/84
155-CIP-3	F. Lin	Production of Erythropoietin	U.S.	675,298	11/30/84
		EPO	Australia	Via PCT US84/02021	12/11/84
			China	85106196	6/19/85
			Canada	469,938	12/12/84
			Czechoslovakia	PV 4438-85	6/18/85
			designating	84308654.7	12/12/84
			Austria		
			Belgium		
			France		
			Germany		
			Italy		
			Luxembourg		
			Netherlands		
			Sweden		
			Switzerland		
			Lichtenstein		
			United Kingdom		

\* Information not yet available.

Exhibit B

ERYTHROPOIETIN (Page 2)

Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
			Finland	852,377	6/14/85
			Denmark	via PCT US84/ 0201	12/11/84
			E. Germany	G/277534-2	6/19/85
			Greece	*	*
			Hungary	2404/85	6/18/85
			Israel	73785	12/11/84
			Japan	Via PCT US84/ 02021	12/11/84
			Korea	7923/1984	12/13/84
			New Zealand	201,501	12/10/84
			Portugal	*	*
			South Africa	84/9625	12/11/84
			Spain	538,519	12/12/84
			USSR	3917560/04	6/19/85

\* Information not yet available.

Exhibit B

ERYTHROPOIETIN (Page 3)

Docket No.	Inventor(s)	Title	Country	S.N.	Filing Date
132	J. Egrie	ATCC HB8209 - Its Monoclonal Antibody to Erythropoietin ATCC HB8209/Budapest	U.S.	463,724	2/4/83
		EPO	Canada Israel Japan	446,767 71001 Via PCT US84/ 00151	2/3/84 2/17/84 2/3/84
			designating Austria Belgium France Germany Italy Luxembourg Netherlands Sweden Switzerland Liechtenstein United Kingdom	84/300693.3	2/3/84
190	P. Lai T. Strickland	Protein Purification	U.S.	747,119	6/20/85

\* Information not yet available.

AMGEN INC.  
AMENDED AND RESTATED EMPLOYEE STOCK PURCHASE PLAN  
-----

1. PURPOSE.  
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(a) The purpose of the Amgen Inc. Employee Stock Purchase Plan (the "Plan") is to provide a means by which employees of Amgen Inc., a Delaware corporation (the "Company"), and its Affiliates, as defined in subparagraph 1(b), which are designated as provided in subparagraph 2(b), may be given an opportunity to purchase stock of the Company.

(b) The word "Affiliate" as used in the Plan means any parent corporation or subsidiary corporation of the Company, as those terms are defined in Sections 424(e) and (f), respectively, of the Internal Revenue Code of 1986, as amended (the "Code").

(c) The Company, by means of the Plan, seeks to retain the services of its employees, to secure and retain the services of new employees, and to provide incentives for such persons to exert maximum efforts for the success of the Company.

(d) The Company intends that the rights to purchase stock of the Company granted under the Plan be considered options issued under an "employee stock purchase plan" as that term is defined in Section 423(b) of the Code.

2. ADMINISTRATION.  
-----

(a) The Plan shall be administered by the Board of Directors (the "Board") of the Company unless and until the Board delegates administration to a Committee, as provided in subparagraph 2(c). Whether or not the Board has delegated administration, the Board shall have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(b) The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine when and how rights to purchase stock of the Company shall be granted and the provisions of each offering of such rights (which need not be identical).

(ii) To designate from time to time which Affiliates of the Company shall be eligible to participate in the Plan.

(iii) To construe and interpret the Plan and rights granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iv) To amend the Plan as provided in paragraph 13.

(v) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company.

(c) The Board may delegate administration of the Plan to a Committee composed of not fewer than two (2) members of the Board (the "Committee"). If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board, subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revert to the Board the administration of the Plan.

### 3. SHARES SUBJECT TO THE PLAN.

-----  
(a) Subject to the provisions of paragraph 12 relating to adjustments upon changes in stock, the stock that may be sold pursuant to rights granted under the Plan shall not exceed in the aggregate twenty four million (24,000,000)\1\ shares of the Company's \$.0001 par value common stock (the "Common Stock"). If any right granted under the Plan shall for any

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\1\ As adjusted for the two-for-one split of the Company's Common Stock effected in the form of a 100% stock dividend, in August 1995, February 1999 and November 1999.

reason terminate without having been exercised, the Common Stock not purchased under such right shall again become available for the Plan.

(b) The stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

4. GRANT OF RIGHTS; OFFERING.

-----  
The Board or the Committee may from time to time grant or provide for the grant of rights to purchase Common Stock of the Company under the Plan to eligible employees (an "Offering") on a date or dates (the "Offering Date(s)") selected by the Board or the Committee. Each Offering shall be in such form and shall contain such terms and conditions as the Board or the Committee shall deem appropriate. If an employee has more than one right outstanding under the Plan, unless he or she otherwise indicates in agreements or notices delivered hereunder: (1) each agreement or notice delivered by that employee will be deemed to apply to all of his or her rights under the Plan, and (2) a right with a lower exercise price (or an earlier-granted right, if two rights have identical exercise prices), will be exercised to the fullest possible extent before a right with a higher exercise price (or a later-granted right, if two rights have identical exercise prices) will be exercised. The provisions of separate Offerings need not be identical, but each Offering shall include (through incorporation of the provisions of this Plan by reference in the Offering or otherwise) the substance of the provisions contained in paragraphs 5 through 8, inclusive.

5. ELIGIBILITY.

-----  
(a) Rights may be granted only to employees of the Company or, as the Board or the Committee may designate as provided in subparagraph 2(b), to employees of any Affiliate of the Company. Except as provided in subparagraph 5(b), an employee of the Company or any Affiliate shall not be eligible to be granted rights under the Plan, unless, on the Offering Date, such employee has been in the employ of the Company or any Affiliate for such continuous

period preceding such grant as the Board or the Committee may require, but in no event shall the required period of continuous employment be equal to or greater than two (2) years. In addition, unless otherwise determined by the Board or the Committee and set forth in the terms of the applicable Offering, no employee of the Company or any Affiliate shall be eligible to be granted rights under the Plan, unless, on the Offering Date, such employee's customary employment with the Company or such Affiliate is at least twenty (20) hours per week and at least five (5) months per calendar year.

(b) The Board or the Committee may provide that, each person who, during the course of an Offering, first becomes an eligible employee of the Company or designated Affiliate will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an eligible employee or occurs thereafter, receive a right under that Offering, which right shall thereafter be deemed to be a part of that Offering. Such right shall have the same characteristics as any rights originally granted under that Offering, as described herein, except that:

(i) the date on which such right is granted shall be the "Offering Date" of such right for all purposes, including determination of the exercise price of such right, provided, however, that if the fair market value of the Common Stock on the date on which such right is granted is less than the fair market value of the Common Stock on the first day of the Offering, then, solely for the purpose of determining the exercise price of such right, the first day of the Offering shall be the "Offering Date" for such right;

(ii) the Purchase Period (as defined below) for such right shall begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board or the Committee may provide that if such person first becomes an eligible employee within a specified period of time before the end of the Purchase Period (as defined below) for such Offering, he or she will not receive any right under that Offering.

(c) No employee shall be eligible for the grant of any rights under the Plan if, immediately after any such rights are granted, such employee owns stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any Affiliate. For purposes of this subparagraph 5(c), the rules of Section 424(d) of the Code shall apply in determining the stock ownership of any employee, and stock which such employee may purchase under all outstanding rights and options shall be treated as stock owned by such employee.

(d) An eligible employee may be granted rights under the Plan only if such rights, together with any other rights granted under "employee stock purchase plans" of the Company and any Affiliates, as specified by Section 423(b)(8) of the Code, do not permit such employee's rights to purchase stock of the Company or any Affiliate to accrue at a rate which exceeds twenty-five thousand dollars (\$25,000) of fair market value of such stock (determined at the time such rights are granted) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company shall be eligible to participate in Offerings under the Plan, provided, however, that the Board may provide in an Offering that certain employees who are highly compensated employees within the meaning of Section 423(b)(4)(D) of the Code shall not be eligible to participate.

6. RIGHTS; PURCHASE PRICE.

-----  
(a) On each Offering Date, each eligible employee, pursuant to an Offering made under the Plan, shall be granted the right to purchase up to the number of shares of Common Stock of the Company purchasable with a percentage designated by the Board or the Committee not exceeding fifteen percent (15%) of such employee's Earnings (as defined in Section 7(a)) during the period which begins on the Offering Date (or such later date as the Board or the Committee determines for a particular Offering) and ends on the date stated in the Offering, which date shall be no more than twenty-seven (27) months after the Offering Date (the

"Purchase Period"). In connection with each Offering made under this Plan, the Board or the Committee shall specify a maximum number of shares which may be purchased by any employee as well as a maximum aggregate number of shares which may be purchased by all eligible employees pursuant to such Offering. In addition, in connection with each Offering which contains more than one Exercise Date (as defined in the Offering), the Board or the Committee may specify a maximum aggregate number of shares which may be purchased by all eligible employees on any given Exercise Date under the Offering. If the aggregate purchase of shares upon exercise of rights granted under the Offering would exceed any such maximum aggregate number, the Board or the Committee shall make a pro rata allocation of the shares available in as nearly a uniform manner as shall be practicable and as it shall deem to be equitable.

(b) The purchase price of stock acquired pursuant to rights granted under the Plan shall be not less than the lesser of:

(i) an amount equal to eighty-five percent (85%) of the fair market value of the stock on the Offering Date; or

(ii) an amount equal to eighty-five percent (85%) of the fair market value of the stock on the Exercise Date.

(c) Each eligible employee shall have the same rights and privileges under the Plan, except as allowed under Section 423(b)(5) of the Code.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.  
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(a) An eligible employee may become a participant in an Offering by delivering a participation agreement to the Company within the time specified in the Offering, in such form as the Company provides. Each such agreement shall authorize payroll deductions of up to the maximum percentage specified by the Board or the Committee of such employee's Earnings during the Purchase Period. "Earnings" is defined as the total compensation paid to an employee, including all salary, wages (including amounts elected to be deferred by the employee, that would otherwise have been paid, under any cash or deferred arrangement established by the

Company), overtime pay, commissions, bonuses, and other remuneration paid directly to the employee, but excluding profit sharing, the cost of employee benefits paid for by the Company, education or tuition reimbursements, imputed income arising under any Company group insurance or benefit program, traveling expenses, business and moving expense reimbursements, income received in connection with stock options, contributions made by the Company under any employee benefit plan, certain cost of living allowances and tax equalization payments made to employees whose payroll originates in the United States and who are working outside the United States, and similar items of compensation or such other inclusions or exclusions as the Board or Committee may determine for one or more specified Offerings. The payroll deductions made for each participant shall be credited to an account for such participant under the Plan and shall be deposited with the general funds of the Company. A participant may reduce (including to zero), increase or begin such payroll deductions after the beginning of any Purchase Period only as provided for in the Offering. A participant may make additional payments into his or her account only if specifically provided for in the Offering and only if the participant has not had the maximum amount withheld during the Purchase Period.

(b) At any time during a Purchase Period a participant may terminate his or her payroll deductions under the Plan and withdraw from the Offering by delivering to the Company a notice of withdrawal in such form as the Company provides. Such withdrawal may be elected at any time prior to the end of the Purchase Period except as provided by the Board or the Committee in the Offering. Upon such withdrawal from the Offering by a participant, the Company shall distribute to such participant all of his or her accumulated payroll deductions (reduced to the extent, if any, such deductions have been used to acquire stock for the participant) under the Offering, without interest, and such participant's interest in that Offering shall be automatically terminated. A participant's withdrawal from an Offering will have no effect upon such participant's eligibility to participate in any other Offerings under the Plan but such participant will be required to deliver a new participation agreement in order to participate in subsequent Offerings under the Plan.

(c) Rights granted pursuant to any Offering under the Plan shall terminate immediately upon cessation of any participating employee's employment with the Company or an Affiliate, for any reason, and the Company shall distribute to such terminated employee all of his or her accumulated payroll deductions (reduced to the extent, if any, such deductions have been used to acquire stock for the terminated employee), under the Offering, without interest.

(d) Rights granted under the Plan shall not be transferable, and shall be exercisable only by the person to whom such rights are granted.

8. EXERCISE.

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(a) On each exercise date, as defined in the relevant Offering (an "Exercise Date"), each participant's accumulated payroll deductions and other additional payments specifically provided for in the Offering (without any increase for interest) will be applied to the purchase of whole shares of stock of the Company, up to the maximum number of shares permitted pursuant to the terms of the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares shall be issued upon the exercise of rights granted under the Plan. The amount, if any, of accumulated payroll deductions remaining in each participant's account after the purchase of shares which is less than the amount required to purchase one share of stock on the final Exercise Date of an Offering shall be held in each such participant's account for the purchase of shares under the next Offering under the Plan, unless such participant withdraws from such next Offering, as provided in subparagraph 7(b), or is no longer eligible to be granted rights under the Plan, as provided in paragraph 5, in which case such amount shall be distributed to the participant after said final Exercise Date, without interest. The amount, if any, of accumulated payroll deductions remaining in any participant's account after the purchase of shares which is equal to the amount required to purchase whole shares of stock on the final Exercise Date of an Offering shall be distributed in full to the participant after such Exercise Date, without interest.

(b) No rights granted under the Plan may be exercised to any extent unless the Plan (including rights granted thereunder) is covered by an effective registration statement pursuant to the Securities Act of 1933, as amended (the "Securities Act"). If on an Exercise Date of any Offering hereunder the Plan is not so registered, no rights granted under the Plan or any Offering shall be exercised on said Exercise Date and the Exercise Date shall be delayed until the Plan is subject to such an effective registration statement, except that the Exercise Date shall not be delayed more than two (2) months and the Exercise Date shall in no event be more than twenty-seven (27) months from the Offering Date. If on the Exercise Date of any Offering hereunder, as delayed to the maximum extent permissible, the Plan is not registered, no rights granted under the Plan or any Offering shall be exercised and all payroll deductions accumulated during the Purchase Period (reduced to the extent, if any, such deductions have been used to acquire stock) shall be distributed to the participants, without interest.

9. COVENANTS OF THE COMPANY.  
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(a) During the terms of the rights granted under the Plan, the Company shall keep available at all times the number of shares of stock required to satisfy such rights.

(b) The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of stock upon exercise of the rights granted under the Plan. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such rights unless and until such authority is obtained.

10. USE OF PROCEEDS FROM STOCK.  
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Proceeds from the sale of stock pursuant to rights granted under the Plan shall constitute general funds of the Company.

11. RIGHTS AS A STOCKHOLDER.

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A participant shall not be deemed to be the holder of, or have any of the rights of a holder with respect to, any shares subject to rights granted under the Plan unless and until certificates representing such shares have been issued or such shares have been credited to an account held by a bank, broker or other nominee of the participant.

12. ADJUSTMENTS UPON CHANGES IN STOCK.

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(a) If any change is made in the stock subject to the Plan, or subject to any rights granted under the Plan (through merger, consolidation, reorganization, recapitalization, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan and outstanding rights will be appropriately adjusted in the class(es) and maximum number of shares subject to the Plan and the class(es) and number of shares and price per share of stock subject to outstanding rights. Such adjustments shall be made by the Board or the Committee, the determination of which shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a "transaction not involving the receipt of consideration by the Company".)

(b) In the event of: (1) a dissolution or liquidation of the Company; (2) a merger or consolidation in which the Company is not the surviving corporation; (3) a reverse merger in which the Company is the surviving corporation but the shares of the Company's Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise; or (4) any other capital reorganization in which more than fifty percent (50%) of the shares of the Company entitled to vote are exchanged, then, as determined by the Board in its sole discretion (i) any surviving corporation may assume outstanding rights or substitute similar rights for those under the Plan, (ii) such rights may continue in full force and effect, or (iii) participants' accumulated

payroll deductions may be used to purchase Common Stock immediately prior to the transaction described above and the participants' rights under the ongoing Offering terminated.

13. AMENDMENT OF THE PLAN.

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(a) The Board at any time, and from time to time, may amend the Plan. However, except as provided in paragraph 12 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company within twelve (12) months before or after the adoption of the amendment, where the amendment will:

(i) Increase the number of shares reserved for rights under the Plan;

(ii) Modify the provisions as to eligibility for participation in the Plan (to the extent such modification requires stockholder approval in order for the Plan to obtain employee stock purchase plan treatment under Section 423 of the Code); or

(iii) Modify the Plan in any other way if such modification requires stockholder approval in order for the Plan to obtain employee stock purchase plan treatment under Section 423 of the Code.

It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible employees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to employee stock purchase plans and/or to bring the Plan and/or rights granted under it into compliance therewith.

(b) Rights and obligations under any rights granted before amendment of the Plan shall not be impaired by any amendment of the Plan, except with the consent of the person to whom such rights were granted or except as necessary to comply with any laws or governmental regulation; provided, however, that the Board shall have the power to terminate any Purchase Period and cause all payroll deductions accumulated during the Purchase Period to be distributed to participants, without interest, without such consent.

14. TERMINATION OR SUSPENSION OF THE PLAN.  
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(a) The Board may suspend or terminate the Plan at any time. No rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) Rights and obligations under any rights granted while the Plan is in effect shall not be altered or impaired by suspension or termination of the Plan, except with the consent of the person to whom such rights were granted or except as necessary to comply with any laws or governmental regulation; provided, however, that the Board shall have the power to suspend or terminate the Plan and terminate any Purchase Period and cause all payroll deductions accumulated during the Purchase Period to be distributed to participants, without interest, without such consent.

15. EFFECTIVE DATE OF PLAN.  
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The Plan shall become effective as determined by the Board.

FIRST AMENDMENT TO  
AMGEN INC.  
CHANGE OF CONTROL SEVERANCE PLAN

This First Amendment to Amgen Inc. Change of Control Severance Plan is adopted as of May 10, 2000 by the Board of Directors (the "Board") of Amgen Inc., a Delaware corporation (the "Company").

RECITALS

WHEREAS, the Company maintains the Amgen Inc. Change of Control Severance Plan, effective as of October 20, 1998, (hereinafter the "Plan"); and

WHEREAS, pursuant to Section 11.3 of the Plan, the Company may amend the Plan from time to time by resolution of the Board;

NOW THEREFORE, BE IT RESOLVED, that the Plan be amended as follows, effective May 11, 2000:

1. Section 1(M) shall be amended and restated in its entirety as follows:

"(M) "Group I Participants" shall mean those senior executive-level staff members of the Company whom the Company has designated as members of the Amgen Executive Committee, as such committee shall be constituted immediately prior to a Change of Control. At or before the occurrence of a Change of Control, the Company shall notify the Group I Participants in writing of their status as Participants in the Plan."

2. This First Amendment shall be and is hereby incorporated in and forms a part of the Plan.

3. Except as set forth herein, the Plan shall remain in full force and effect.

I hereby certify that the foregoing First Amendment to the Plan was duly adopted by the Board of Directors of Amgen Inc. on May 10, 2000.

By: /s/ Edward Garnett  
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Edward Garnett

Title: Vice President,  
Human Resources

May 10, 2000

Mr. Gordon M. Binder  
130 Delfern Drive  
Los Angeles, CA 90077

Re: Agreement Regarding Part-Time Special Assignment Position  
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Dear Gordon:

On behalf of Amgen Inc. ("Amgen" or the "Company"), I am pleased to confirm in this letter agreement (the "Agreement") the terms and conditions under which you will continue to be employed by Amgen from and after the date upon which you cease to serve as Amgen's Chief Executive Officer which will occur on May 11, 2000 (the "Effective Date"). You will remain in your current position and receive all compensation and benefits of that position between now and the Effective Date. This Agreement also provides for the termination of your employment with Amgen on or before December 31, 2002, as set forth below.

1. POSITION AND DUTIES  
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On the Effective Date, you will retire and resign from all offices you hold in Amgen and its subsidiaries, except that, if elected by the stockholders of the Company at the Annual Meeting of Stockholders to be held on May 11, 2000, then you will remain as a member of the Board of Directors until December 31, 2000, and if appointed by the Board of Directors to be Chairman of the Board of Directors, then you will remain as Chairman of the Board of Directors until December 31, 2000. In connection with resigning your offices, you agree to execute and return to Amgen with this Agreement a signed original resignation letter (the "Resignation Letter") on your Amgen letterhead in the form provided in Appendix A to this Agreement. Appendix A is hereby incorporated into and made part of the Agreement by reference.

On the Effective Date you will cease to be a regular full-time employee of Amgen and you will also continue to be employed by Amgen as an employee in a part-time special assignment position, as Special Advisor to the Chief Executive Officer. As Special Advisor to the Chief Executive Officer, you will assist Kevin Sharer or his successor or designee (collectively "Your Supervisor"). You will assist Your Supervisor in monitoring and evaluating various federal government developments as they relate to Amgen's current products, products which Amgen is in the process of developing and potential future products, including those which Amgen may acquire by corporate or other acquisitions. You will also advise Your Supervisor on certain arbitration and litigation matters, such as those involving Johnson & Johnson and Transkaryotic Therapies, Inc. and such other matters as you and Your Supervisor mutually agree upon.

Upon Your Supervisor's reasonable request, you will be required to provide Your Supervisor with written or oral reports and/or copies of other written materials with regard to the foregoing. Your Supervisor will evaluate your performance.

You will be a member of the Executive Department and as such, Your Supervisor will control and direct the manner in which you perform the services under this Agreement, including the details and means by which you provide your services.

You will be an employee of Amgen for all purposes during the term of this Agreement and will not be an independent contractor.

As we have discussed, the position of Special Advisor to the Chief Executive Officer is a part-time special assignment position in which you will be expected to work a minimum of ten (10) hours per month; however, you also agree that, to the extent that Your Supervisor requests, you will work up to twenty (20) hours per month. In the event that Amgen requests, and you agree, to work more than twenty (20) hours per month, then you will receive no additional compensation or benefits for such additional work. Your time spent traveling pursuant to this Agreement shall count toward your hours worked under this Agreement. For any month in which Amgen does not specially assign you a sufficient amount of work to meet your minimum hour requirement, you should satisfy your minimum by independently identifying, researching, and evaluating issues and developments in your areas of responsibility, as set forth above, and reporting on your findings to Your Supervisor.

If requested by Your Supervisor, you agree to attend certain meetings or programs related to your area of expertise so long as such meeting or program does not unreasonably interfere with your other activities.

You will maintain a log showing the time you have spent performing the foregoing services and this log shall be deemed conclusive evidence of the time spent. Amgen, at any time, may request a copy of your log and you agree to provide such a copy within a reasonable period of time after the request is made. Furthermore, from time to time, your duties may require you to travel and attend meetings at various locations, including Amgen's Thousand Oaks facility, and you agree that no reasonable request by Your Supervisor for travel or attendance at meetings will be refused. Your Supervisor will work with you in scheduling any such business trips or meetings so that they do not unreasonably interfere with your other activities and Amgen will reimburse you for your reasonable travel expenses pursuant to the reimbursement policy(ies) in place at Amgen for corporate officers at the time you incur such expenses. In the event that you fly on Amgen business on a private aircraft that you own (in whole or in part), then Amgen will reimburse you for the cost of such a trip in the amount of the applicable first-class commercial airfare rate for such a trip.

We have agreed that your part-time special assignment will continue until December 31, 2002, subject to extension as you and Amgen may agree in writing or to earlier termination by you or Amgen as set forth in Paragraph 8 of this Agreement. As long as you are employed by Amgen, you will continue to be subject to Amgen's policies and procedures, including but not limited to those relating to the non-disclosure of proprietary and confidential information and you will continue to be subject to the Amgen Inc. Proprietary Information and Inventions Agreement, executed by you on or about June 1, 1982 (the "Proprietary Agreement") (which also contains obligations that survive the termination of your employment with Amgen). However, notwithstanding the foregoing, you will not be required to comply with Procedures 3, 10 and 11 of the Company's Corporate Policy Number 230 ("Conflict of Interest/Insider Information"), a copy of which is attached hereto as Appendix B, commencing on the opening of business on the third full business day following the Company's public release detailing the Company's full financial results for the fiscal year ended December 31, 2000.

During the term of your part-time special assignment, except as set forth herein, you may not be employed by any person or company other than Amgen, without Amgen's prior approval. You may be self-employed, an independent contractor, a partner, a consultant, or a member of a venture capital or private equity firm. You may only join the board of directors of any company within the fields of biotechnology, human therapeutics, or pharmaceuticals with Amgen's advance written permission, but you may join the board of directors of any other company without Amgen's permission. You may also engage in teaching, charitable, civic, or political activities. You may engage in the activities described in the preceding three sentences provided that such activity: (1) does not interfere with your duties under this Agreement and (2) does not violate the terms of the Proprietary Agreement. You also agree that during the term of this Agreement, you will not solicit for employment or affiliation, including as independent contractor, any officer, director, or employee of Amgen or its subsidiaries.

2. COMPENSATION AND BENEFITS  
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Following is a brief description of the compensation and benefits you will receive under this Agreement during your part-time special assignment. The terms and conditions of all of your benefits are subject to the terms and conditions of each of the applicable plans, policies or arrangements, as they may be amended or terminated by Amgen from time to time.

2.1 Compensation: Your compensation will be \$80,000 per month from the -----  
Effective Date through December 31, 2000, and \$40,000 per month from December 31, 2000 through December 31, 2002, subject to applicable income tax and employment tax withholding requirements. In addition, Amgen will reimburse you for any reasonable business expenses you incur in performing your duties, subject to Amgen's standard employee expense reimbursement policies.

2.2 Administrative Support and Office Space: Amgen will provide you with  
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an office and secretarial assistance for any work that you perform while at Amgen's Thousand Oaks headquarters. You will also be provided any office equipment and supplies you may need to perform your duties under this Agreement at Amgen's Thousand Oaks headquarters and you will have access to the services of Amgen's travel department.

If you maintain an office where you will perform some of the services required by this Agreement and this office is located more than 15 miles from Amgen's Thousand Oaks headquarters, then Amgen will reimburse you for the actual amount of rental expenses for such an office and the charge for up to two (2) parking spaces at the office building complex where your office is located up to a maximum amount of \$6,000 per month. Amgen will supply you with office furniture for this office and at the end of your special assignment period, you must either return this furniture to Amgen or purchase the furniture from Amgen at its then depreciated value as determined by Amgen. Amgen will supply you with a secretary through a temporary employment agency utilized by Amgen. All other reasonable business expenses incurred by you in connection with such an office will be paid by you and reimbursed by Amgen.

2.3 Management Incentive Plan: You will not be eligible to participate in  
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Amgen's Management Incentive Plan (the "MIP") for any year after the 1999 calendar year.

2.4 Special Bonus for 2000 Calendar Year: As part of the transition to  
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your part-time special assignment position, you will be entitled to a special bonus in the amount of 37% of the MIP payment that you would have received for the calendar year 2000 based on what would have been your MIP rating for the calendar year 2000, if you had been eligible for that MIP payment and if you had been deemed to have been a regular full-time employee for the entire year for the purposes of MIP. This special bonus will be paid to you at the same time that MIP distributions are made to the participants in the MIP in 2001.

2.5 Supplemental Retirement Plan: As an employee in a part-time special  
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assignment position, you will no longer be eligible to receive additional credits in your supplemental retirement plan account, although you will continue to maintain an account and receive earnings on the balance in your account until the termination of your employment.

2.6 Retirement and Savings Plan: Pursuant to Section 3.3 of the 401(k)  
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Plan, employees that are eligible to participate in the 401(k) Plan are those that are classified as "regular full-time" or "regular part-time" employees. By signing below, you expressly acknowledge and agree that Amgen is not classifying you as a

regular full-time or regular part-time employee and therefore, as of the Effective Date, you will not be eligible to make contributions or to have contributions made on your behalf to the 401(k) Plan. This letter qualifies as an agreement pursuant to Section 3.3(c)(2) of the 401(k) Plan. You will, however, be able to maintain your 401(k) account in the Amgen plan to the extent allowed by law.

2.7 Change of Control Severance Plan: You will continue to be eligible to

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participate in the Amgen Inc. Change of Control Severance Plan (the "CIC Plan"). However, on the Effective Date you will cease to be a Group I Participant and will become a Group II Participant in the CIC Plan by virtue of your ceasing to be a member of Amgen's Operating Committee. Notwithstanding the foregoing, in the event that the aggregate benefits provided for in this Agreement are greater than those provided in the CIC Plan upon a termination of employment for which you would be eligible to receive benefits under the terms and conditions of the CIC Plan, this Agreement, rather than the CIC Plan shall govern and control your rights upon a termination of employment; provided, that, in such event, and if applicable, you shall also receive the 280G tax gross-up benefit provided in Section 4.1(G) of the CIC Plan.

2.8 Stock Options:

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2.8.1 No New Grants: As an employee in a part-time special assignment  
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position, you will not be eligible to receive additional stock option grants after the Effective Date.

2.8.2 Vesting During Special Assignment: To the extent that you  
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continue in your part-time special assignment, you will be eligible to continue to vest in all unvested options that have previously been granted to you by Amgen on the dates and in the manner provided in your stock option grant agreements and applicable stock option plans. No stock options will vest following the Termination Date as defined in Paragraph 8 of this Agreement.

2.8.3 Voluntary Retirement: Nothing in this Agreement shall be  
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construed as limiting (i) your right to voluntarily retire from Amgen during or at the end of the special assignment or (ii) the applicability of Paragraph I of the Grants of Stock Options listed on Appendix C to this Agreement to any termination of your employment.

2.8.4 Cooperation To Restructure: As we have discussed, it is our  
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intention that your ability to continue to vest in and exercise options while in your part-time special assignment position will not result in any additional compensation charges to Amgen in accordance with U.S. generally accepted

accounting principles. Accordingly, if at any time Amgen determines that it is reasonably likely that Amgen will incur a compensation charge as a result of your vesting or exercising options in your part-time special assignment position then you agree that you will use your reasonable best efforts to cooperate with Amgen to restructure this Agreement and your position as Amgen reasonably determines is necessary for you to continue to be able to vest and exercise your options without creating a compensation charge to Amgen in accordance with U.S. generally accepted accounting principles and without causing you to lose any of the benefits of this Agreement. It is expressly understood that your "reasonable best efforts to cooperate with Amgen" shall not require that you take or forbear from taking any action that would result in any loss of value of the options.

2.8.5 No Amendment to Stock Option Grant Agreements or Stock Option

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Plans: Nothing in this Agreement shall be deemed to alter,

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amend, or otherwise modify the terms of your stock option grant agreements or the terms of the applicable stock option plans.

2.9 Medical, Dental, and Vision Insurance and COBRA: Your medical, dental,

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and vision insurance coverage will terminate on the Effective Date. If after the Effective Date, you or your eligible dependents should elect to continue coverage under Amgen's group health plan(s) under the Consolidated Omnibus Budget Reconciliation Act ("COBRA") continuation rights, and you or your eligible dependents timely take the required steps to initiate such coverage, then Amgen will pay the cost of COBRA coverage for you and your eligible dependents until the earlier of December 31, 2002, or until you and/or your eligible dependents no longer qualify for COBRA continuation rights or in the case of your dependents, the date on which such dependents cease to be eligible dependents on your Amgen group health plan(s), which ever comes first. If you and/or your eligible dependents qualify for COBRA benefits on or after December 31, 2002, then you and/or your eligible dependents will have the option of continuing coverage under Amgen's group health plan(s), under COBRA and at your own expense. If you and/or your eligible dependents lose COBRA eligibility prior to December 31, 2002, and you obtain health insurance coverage for you and/or your eligible dependents for the period between the time you and your eligible dependents lose such coverage and December 31, 2002, then Amgen will reimburse you for the full cost of such insurance premiums. To receive reimbursement, submit copies of the health insurance premium invoices and other applicable information on a monthly basis to Amgen. For a complete description of the rights and responsibilities you and your eligible dependents have under COBRA, you must refer to the COBRA documents that will be sent to you by Amgen or its designee under separate cover.

2.10 Basic Life Insurance: Your Basic Life Insurance coverage will

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terminate on the Effective Date. If you are interested in converting this insurance to an individual policy, please contact Jean Ellis at Aetna (860) 273-7252 within thirty (30) days

after the Effective Date.

2.11 Long-Term Disability Insurance: Your Long-Term Disability Plan  
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coverage will terminate on the Effective Date and there is no conversion policy or plan available for this coverage.

2.12 Amgen Foundation Matching Funds: During the term of your special  
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assignment, contributions you make to qualified organizations will continue to be eligible for matching funds from the Amgen Foundation, subject to the same terms, conditions, and limitations that apply to contributions made by regular, full-time employees of Amgen.

2.13 Other Benefits: As an employee in a part-time special assignment  
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position, you will not be eligible to participate in the following Amgen benefit plans and programs as well as any other benefits not specifically listed in this letter: Dependent Care Assistance Program; Medical Flexible Spending Account; Employee Stock Purchase Plan; Voluntary and Dependent Life Insurance coverage; Accidental Death and Dismemberment benefit; use of Amgen Fitness Center facilities; use of Amgen Child Care Center facilities; personal illness; vacation/optional holiday pay; family illness/personal time; bereavement leave or holidays. Your accrued and unused vacation hours and optional holiday pay will be paid to you on the next regularly scheduled payroll date following the Effective Date.

3. TRANSFER OF COMPANY PROPERTY  
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Except as provided in the remainder of this Subparagraph, you promise that on or before the Termination Date, as defined in Paragraph 8 of this Agreement, you will return to Amgen all files, memoranda, documents, records, copies of the foregoing, credit cards, keys, and any other Amgen property in your possession or under your control. As an employee in a part-time special assignment position, you will continue to have access to and use of the cellular telephone and telefax machines that Amgen previously provided to you. As of the termination of your employment with Amgen, you will be entitled to retain the equipment referenced in the preceding sentence.

4. OFFICERS AND DIRECTORS INSURANCE  
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During your part-time special assignment and for six (6) years following the Termination Date, you will be covered by such officers and directors insurance coverage that Amgen provides to its senior executive officers at your salary grade level during that time period. In addition, Amgen shall indemnify and hold you and your estate harmless both during and after the entire term of your employment (including your service hereunder) to the fullest extent permitted by law with regards to actions or inactions in relation to your duties performed at Amgen, both before and after the date of this Agreement. In the

event that you are being indemnified pursuant to this Paragraph 4, then you will be entitled to the advancement of expenses to the same extent as Amgen corporate officers would then be entitled to such advancement of expenses. Furthermore, you will be entitled to reimbursement of expenses incurred in accordance with your rights under California Labor Code Section 2802.

5. LEGAL FEE AND FINANCIAL/TAX CONSULTING REIMBURSEMENT  
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Amgen will reimburse you for the legal expenses reasonably incurred by you in connection with the review of this Agreement up to a maximum amount of \$10,000. Amgen will also reimburse you for financial and/or tax counseling expenses that you reasonably incur, up to a maximum amount of \$3,000 per year, for each year of this Agreement.

6. REFERENCE  
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Amgen will provide you with a positive written factual reference. I should be listed as your work reference. You agree to confer with me on the form and nature of the reference to be provided to third parties concerning the work that you have performed at Amgen. If, by sixty (60) days after the Effective Date, you are unable to reach agreement with me on the written reference to be provided, then Amgen's only obligation will be to respond to inquiries by confirming to third parties the dates of your employment at Amgen and the last position you held as an Amgen employee.

7. RELOCATION  
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If you decide to relocate outside of the fifty (50) mile radius of your Residence (as defined below) during the period of your part-time special assignment or immediately at the termination thereof for any reason other than for a Stated Reason, as defined below, and sell your current, local, primary residence located in Los Angeles, California (the "Residence") so that the sale escrow closes no later than December 31, 2002, then Amgen will provide you with the following:

- 7.1 If your new employer, if any, provides for part of the following expenses, then Amgen would pay normal and customary amounts beyond those which such new employer paid, up to the amounts that Amgen would normally pay, as of the date your employment with Amgen terminated, to newly hired Amgen employees in your job: normal and customary costs for the packing, shipping, delivery, storage (for up to ninety (90) days) and unpacking of your common household goods and furnishings.
- 7.2 If you shall sell your Residence so that the close of escrow on the sale occurs prior to December 31, 2002, then in such event, Amgen will reimburse you for those

normal and non-recurring customary sales costs associated with the sale of such residence, subject to the following terms and conditions:

7.2.1 Amgen's obligation will be limited to that amount which, as of the day immediately prior to the date of this Agreement, Amgen would pay to reimburse other employees of your then salary grade level;

7.2.2 to the extent that your new employer, if any, reimburses you for, or pays any of, such non-recurring customary sales costs, then Amgen will only reimburse you for that portion of the non-recurring customary sales costs that exceed the amount paid for by such new employer; and

7.2.3 you provide all documentation requested by Amgen in connection with this Subparagraph 7.2, upon the request of Amgen.

7.3 If you meet the above conditions and so elect, Amgen will grant you the opportunity to place your Residence in the "Amgen Marketing Assistance and Homesale Program" (the "Program"). For a description of the Program, please contact Christine Swinburne of the Amgen Human Resources Department. In order to participate in the Program, you must notify Ms. Swinburne in writing, of your election to participate in the Program no later than June 30, 2002, in order to complete the home sale process by December 31, 2002. In order for Amgen to provide you with the assistance provided for in this Subparagraph 7.3 in connection with the sale of your Residence, you must give Amgen control over the disposition of the property, must provide such documentation as Amgen may request and must cooperate with Amgen in the sale of the Residence.

8. EARLY TERMINATION OF SPECIAL ASSIGNMENT

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We have agreed that you will continue in your part-time special assignment position until December 31, 2002, at which time your employment with Amgen will terminate, provided however, that Amgen may terminate your employment prior to December 31, 2002 and you may terminate your employment prior to December 31, 2002 upon thirty (30) days prior written notice to Amgen.

For purposes of this Paragraph 8, a "Stated Reason" means (i) your conviction of a felony related to the business of Amgen; (ii) the engaging by you in conduct that constitutes willful gross neglect or willful gross misconduct in carrying out your duties set forth in Paragraph 1 of this Agreement, resulting, in either case, in material economic harm to Amgen, unless you believed in good faith that such conduct was in, or not contrary to, the best interests of Amgen; or (iii) your material breach of any of the terms of this Agreement. In order for an event described in clauses (ii) and (iii) of the preceding sentence to qualify as a Stated Reason, Amgen must give written notice of the event to you and you must fail to cure the event within 60 days of receipt of that written notice.

For purposes hereof, no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith.

For purposes of this Paragraph 8, a "Covered Breach" means a breach by Amgen of its obligations under this Agreement in the following manner only (i) any reduction in your salary or benefits provided for in this Agreement or (ii) the assignment of duties to you that are inconsistent with, or greater in scope than, those set forth in Paragraph 1 of this Agreement or (iii) a reduction in your title or position or (iv) a material breach of Paragraphs 4, 6, or 12 of this Agreement by Amgen or (v) a failure by Amgen to have any successor expressly assume this Agreement in accordance with Paragraph 16 of this Agreement. In order for an event described in the preceding sentence to qualify as a Covered Breach, you must give written notice of the event to Amgen and Amgen must fail to cure the event within 60 days of receipt of that written notice.

In the event your employment is terminated by Amgen for a Stated Reason or if you terminate your employment for any reason other than a Covered Breach then your payments and benefits from Amgen under this Agreement, including but not limited to the vesting of your stock options, will cease as of the effective date of the termination of your employment.

In the event your employment is terminated by Amgen not for a Stated Reason or if you terminate your employment for a Covered Breach, then (i) you shall be paid in a cash lump-sum all of the remaining cash payments due to you under this Agreement from the date of your termination through December 31, 2002, (ii) you shall continue to be provided the benefits set forth in Paragraph 2.9 of this Agreement through December 31, 2002 and (iii) Amgen shall take the necessary corporate action to accelerate the vesting of all of your outstanding and then unvested stock options so that they shall vest and become immediately exercisable in full as of the Termination Date; such stock options, as so accelerated shall be exercisable as provided in your stock option grant agreements and applicable stock option plans. Amgen shall provide you with a copy of the resolutions taking the action described in clause (iii) of the preceding sentence.

The date of the termination of your employment for any of the foregoing reasons, or upon your death, is hereinafter referred to as the "Termination Date".

9. DEATH AND DISABILITY  
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In the event of the termination of your employment hereunder by reason of your death or disability (within the meaning of Title II or XVI of the Social Security Act and as determined by the Social Security Administration) prior to December 31, 2002, all of the remaining payments pursuant to Paragraphs 2.1 and 2.4 of this Agreement will be payable to you, or in the event of your death, to the beneficiary or beneficiaries that you designate in writing to Amgen (if you make no such written designation, then such amounts would be payable to the beneficiary or beneficiaries you have designated for purposes of Amgen's 401(k) Plan). If, on your death, your spouse qualifies for coverage

under Amgen's group health plan(s) pursuant to COBRA continuation rights, or if your spouse does not qualify for COBRA continuation rights but obtains health insurance coverage, then Amgen will continue to either pay the cost of COBRA coverage for your spouse, or reimburse your spouse for the full cost of such insurance premiums, whichever applies, through December 31, 2002, pursuant to the procedures set forth in Paragraph 2.9 of this Agreement. Your other remaining benefits will be treated according to their specific terms concerning such death or disability. For purposes of Paragraph 8(a) of the Amgen Inc. Amended and Restated 1988 Stock Option Plan and Paragraph 10(a) of the Amgen Inc. Amended and Restated 1991 Equity Incentive Plan, your employment with Amgen shall be deemed to have commenced in 1982, when you first became an employee at Amgen.

10. INTERPRETATION  
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This Agreement and Appendix A and Appendix B attached hereto shall be construed as a whole according to their fair meaning, and not strictly for or against any of the parties.

Unless the context indicates otherwise, the term "or" shall be deemed to include the term "and" and the singular or plural number shall be deemed to include the other. Paragraph headings used in this Agreement are intended solely for convenience of reference and shall not be used in the interpretation of any of this Agreement.

11. NOTICES  
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For the purposes of this Agreement, notices, demands and all other communications provided for in this Agreement shall be in writing and shall be deemed to have been duly given when delivered either personally or by United States certified or registered mail, return receipt requested, postage prepaid, addressed, if to you, to the last address on file with Amgen and if to Amgen, to its executive offices or to such other address as any party may have furnished to the others in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

12. LEGAL FEES; ARBITRATION  
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12.1 Agreement to Arbitrate: Any dispute (an "Arbitrable Dispute")  
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arising between the parties, including but not limited to those concerning the formation, validity, interpretation, effect, or alleged violations of this Agreement, must be submitted to binding arbitration for resolution in Los Angeles, California in accordance with the rules and procedures of the Employment Dispute Resolution Rules of the American Arbitration Association then in effect. The decision of the arbitrator shall be final and binding on both parties, and any court of competent jurisdiction may enter judgment upon the award. Except for an action taken outside of arbitration pursuant to Subparagraph 12.4 of this Agreement, should either party pursue any other legal or administrative action against the other, the responding party shall be entitled to the return of any payments that party made under the

Agreement and shall be entitled to recover all costs, expenses and attorneys' fees the responding party incurs as a result of such action. The arbitrator may not modify or change this Agreement in any way.

12.2 Costs of Arbitration: Each party shall pay the fees of their

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respective attorneys, the expenses of their witnesses and any other expenses connected with the arbitration, but all other costs of the arbitration, including the fees of the arbitrator, cost of any record or transcript of the arbitration, administrative fees and other fees and costs shall be paid in equal shares by you and Amgen. The party losing the arbitration shall reimburse the party who prevailed for all fees and expenses the prevailing party paid pursuant to the preceding sentence, and (where a prevailing-party attorney's fees provision exists) shall also reimburse the prevailing party for attorney's fees paid.

12.3 Exclusive Remedy: Arbitration in this manner shall be the

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exclusive remedy for any Arbitrable Dispute. The arbitrator's decision or award shall be fully enforceable and subject to an entry of judgment by a court of competent jurisdiction. Except for an action taken outside of arbitration pursuant to Subparagraph 12.4 of this Agreement, should you or Amgen, without the consent of the other party, attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this Paragraph 12, the responding party shall be entitled to recover from the initiating party all damages, expenses and attorneys' fees incurred as a result.

12.4 Sole Exception: Notwithstanding the foregoing, a dispute relating

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to the alleged use or disclosure of information which is prohibited by the Proprietary Agreement, and/or the criticism, denigration or disparagement of Amgen or any of Amgen's products, processes, experiments, policies, practices, standards of business conduct, or areas or techniques of research may be resolved through a means other than arbitration, at Amgen's sole option.

13. GOVERNING LAW

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This Agreement is governed by, and is to be construed and enforced in accordance with, the laws of the State of California, without regard to principles of conflicts of laws.

14. TAXES

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You acknowledge and agree that all payments made pursuant to this Agreement shall be made less applicable tax withholdings and/or other withholdings as required by law. You acknowledge and agree that you, and not Amgen, shall be solely responsible for any taxes imposed upon you as a result of the payments and benefits you receive under the Agreement with the sole exception of the potential 280G tax gross-up as provided in Subparagraph 2.7 of this Agreement. This paragraph shall not be construed to require

you to pay Amgen's portion of any employment tax withholding, such as Amgen's portion of FICA or FUTA.

15. NO ASSIGNMENT OR DELEGATION  
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Amgen has selected you for this part-time special assignment because it has judged that your unique experience and skills are those Amgen required for the job. Accordingly, you may not assign or delegate any of your duties or responsibilities under this Agreement.

16. SUCCESSORS; BINDING AGREEMENT  
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16.1 Amgen's Successors: No rights or obligations of Amgen under this  
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Agreement may be assigned or transferred except that Amgen will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Amgen to expressly assume and agree to perform this Agreement in the same manner and to the same extent that Amgen would be required to perform it if no such succession had taken place. As used in this Agreement, "Amgen" shall mean Amgen as herein before defined and any successor to its business and/or assets (by merger, purchase or otherwise) which executes and delivers the agreement provided for in this Paragraph 16 or which otherwise becomes bound by all the terms and provisions of this Agreement by operation of law.

16.2 Your Successors: No rights or obligations of you under this  
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Agreement may be assigned or transferred by you other than your rights to payments or benefits hereunder, which may be transferred only by will or the laws of descent and distribution. Upon your death, this Agreement and all rights of you hereunder shall inure to the benefit of and be enforceable by your beneficiary or beneficiaries, personal or legal representatives, or estate, to the extent any such person succeeds to your interests under this Agreement. You shall be entitled to select and change a beneficiary or beneficiaries to receive any benefit or compensation payable hereunder following your death by giving Amgen written notice thereof. In the event of your death or a judicial determination of your incompetence, reference in this Agreement to you shall be deemed, where appropriate, to refer to your beneficiary (ies), estate or other legal representative(s). If you should die following your Termination Date while any amounts would still be payable to you hereunder if you had continued to live, all such amounts unless otherwise provided herein shall be paid in accordance with the terms of this Agreement to such person or persons so appointed in writing by you, or otherwise to your legal representatives or estate.

17. ENTIRE AGREEMENT  
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The Proprietary Agreement, your stock option agreements, this Agreement and Appendices A, B and C attached hereto, constitute the entire agreement, arrangement and understanding between you and Amgen; they may not be modified or canceled in any manner except by a writing signed by both you and Amgen. This Agreement supersedes any prior or contemporaneous agreement, arrangement or understanding on this subject matter. By executing this Agreement, you expressly acknowledge the termination of any such prior agreement, arrangement or understanding. Also, by executing this Agreement, you affirm that no one has made any written or verbal statement that contradicts the provisions of this Agreement.

Sincerely yours,

/s/ Edward F. Garnett  
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Amgen Inc.  
By: Edward F. Garnett  
Vice President, Human Resources

Acknowledged and Agreed:

/s/ Gordon M. Binder  
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Gordon M. Binder

Dated: 5/10/00  
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RESIGNATION

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The undersigned hereby retires and resigns as Chief Executive Officer of Amgen Inc. and as a Director of the Amgen Foundation effective May 11, 2000. The undersigned also agrees to resign from the Board of Directors and as Chairman of the Board of Directors of Amgen Inc. effective December 31, 2000.

/s/ Gordon M. Binder

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Gordon M. Binder

APPENDIX B

AMGEN -- Corporate Policy and Procedure

SUBJECT: Conflict of Interest/Inside Information

POLICY:

Amgen staff members may receive important information that is not yet publicly available ("inside information") about Amgen or about other publicly-traded companies with which Amgen does business. Because of access to this information, staff members may be in a position to profit financially by buying or selling or in some other way dealing in Amgen stock or stock of another publicly-traded company. Staff members may also be in a position to benefit financially or otherwise by passing this information on to some other person.

"Inside information" is non-public information that would be important to anyone who may trade in Amgen stock, or other publicly-traded companies with which Amgen does business. As a general rule, if the non-public information would lead a staff member to consider buying or selling a company's stock, it would likely have the same effect on others.

For anyone to use such information, or to disclose it to someone else, in order to gain personal benefit is illegal. Any sale or purchase of stock based on such information is illegal, regardless of the amount of stock involved. Furthermore, both for the protection of staff members and Amgen, it is important to avoid the appearance as well as the fact of insider trading or disclosure of inside information.

It is the policy of Amgen to prohibit its staff members from engaging in any activity or practice in conflict with the interests of the Company, or which could be viewed as insider trading or disclosure of inside information.

APPLICABILITY: All Amgen staff members

PROCEDURE:

1. Amgen staff members should not allow themselves to be placed in a position where a conflict of personal interest and company interest may exist, or appear to exist. Amgen staff members must use care to avoid even the appearance of impropriety. When in doubt

as to whether a certain activity represents a conflict of interest the staff member should contact the Law Department.

2. Amgen staff members are prohibited from buying or selling shares of Amgen stock while in possession of material confidential information that has not become generally known to the public.
3. In order to avoid any implication that any Amgen staff member might be inadvertently engaging in insider trading, Amgen staff members are prohibited from engaging in trades of puts, calls, options (whether "covered" or not), short sales and similar transactions in the Company's stock.
4. Staff members who possess "inside information" are prohibited from trading in a company's stock, advising anyone else to do so, or disclosing or otherwise communicating the information to anyone else, including, but not limited to: family members, friends, brokers, etc., until the information has been widely circulated to the public.
5. Amgen staff members should deal with all suppliers, customers and all other persons doing business with Amgen in a completely fair and objective manner without favor or preference based upon personal financial or familial considerations.
6. Amgen staff members should neither seek nor accept, directly or indirectly, any payment, fees, loans, or services from any person or firm as a condition or result of their doing business with Amgen or any of its subsidiaries.
7. Amgen staff members should not accept gifts from any person or firm doing or seeking to do business with the Company under circumstances from which it might reasonably be inferred that the purpose of the gift is to influence the staff member in the conduct of Company business with the donor. Such gifts should be returned with a note of explanation. Staff members are not prohibited from accepting gifts of nominal value when circumstances clearly show that the gifts are offered for reasons of personal esteem and affection, or in accordance with normal business practices.
8. Amgen staff members should not do business with a relative on behalf of Amgen or any of its subsidiaries. If a situation should arise where a related family member is negotiating to do business with Amgen, then the staff member must disclose their relationship with the family member to his or her supervisor or others involved in the negotiations.
9. Amgen staff members should not hold any financial interest in any firm or corporation which is a competitor of or which does or seeks to do business with Amgen or its subsidiaries if such interest may influence any decision that person might make in the performance of their Amgen responsibilities.
10. Amgen staff members should not make investments in any securities of any corporation with which Amgen has entered into any type of research collaboration or joint venture ("Partner"). This prohibition applies to investments in the Common or Preferred Stock of

such Partner, investments in limited partnerships sponsored by the Partner or investments in any puts, calls or convertible securities of the Partner. This policy does not require divestiture of investments made before this policy took effect, or made before the staff member joined Amgen or before Amgen entered into the research collaboration or joint venture. This policy does not prohibit investments in publicly traded mutual funds that invest in any Partner.

11. Amgen staff members have the affirmative duty to disclose to their responsible corporate officer the existence of any personal or material financial interest in any firm or corporation which is a competitor of or which seeks to do or does business with Amgen or any of its subsidiaries. Corporate officers should review each case with the General Counsel or Corporate Counsel, to determine whether there is a violation of this policy.

Individuals who fail to comply with the requirements of this policy may be subject to disciplinary action, up to, and including, termination of employment.

Policy Number: 230  
Effective Date: June, 1992

APPENDIX C

Grant Number	Date of Grant
927796	07/01/97
931893	07/01/97
933504	07/01/98
938857	07/01/98



THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS CONTAINED IN THE COMPANY'S QUARTERLY REPORT ON FORM 10-Q FOR THE QUARTER ENDED JUNE 30, 2000 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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6-MOS	DEC-31-2000	JAN-01-2000	JUN-30-2000
			136
	1,485	333	21
	2,383	273	2,494
	855	4,543	836
	0	223	0
		0	0
4,543		3,484	1,504
	1,729		187
	187		
	393		
	0		
	8		
	824		
569	256		
	0		
	0		0
	569		
	0.55		
	0.52		

Item consists of research and development expenses.

Factors That May Affect Amgen

Amgen operates in a rapidly changing environment that involves a number of risks, some of which are beyond our control. The following discussion highlights some of these risks and others are discussed elsewhere herein.

Product development

We intend to continue an aggressive product development program. Successful product development in the biotechnology industry is highly uncertain, and very few research and development projects produce a commercial product. Product candidates that appear promising in the early phases of development, such as in early human clinical trials, may fail to reach the market for a number of reasons, such as:

- - the product candidate did not demonstrate acceptable clinical trial results even though it demonstrated positive preclinical trial results
- - the product candidate was not effective in treating a specified condition or illness
- - the product candidate had harmful side effects on humans
- - the necessary regulatory bodies (such as the FDA) did not approve our product candidate for an indicated use
- - the product candidate was not economical for us to manufacture it
- - other companies or people have or may have proprietary rights to our product candidate (e.g. patent rights) and will not let us sell it on reasonable terms, or at all
- - the product candidate is not cost effective in light of existing therapeutics

Several product candidates have failed at various stages in the product development process, including BDNF, Megakaryocyte Growth and Development Factor (MGDF) and GDNF. For example, in 1997, we announced the failure of BDNF (for the treatment of ALS by subcutaneous injection administration route), because the product candidate, as administered, did not produce acceptable clinical results in a specific indication after a phase 3 trial, even though BDNF had progressed successfully through preclinical and earlier clinical trials. Of course, there may be other factors that prevent us from marketing a product. We cannot guarantee we will be able to produce commercially successful products. Further, clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians and others which may delay, limit or prevent further clinical development or regulatory approvals of a product candidate. Also, the length of time that it takes for us to complete clinical trials and obtain regulatory approval for product marketing has in the past

varied by product and by the indicated use of a product. We expect that this will likely be the case with future product candidates and we cannot predict the length of time to complete necessary clinical trials and obtain regulatory approval. See "- Regulatory matters."

#### Regulatory matters

Our research, preclinical testing, clinical trials, facilities, manufacturing, pricing and sales and marketing are subject to extensive regulation by numerous state and federal governmental authorities in the U.S., such as the FDA and the Health Care Financing Administration ("HCFA"), as well as by foreign countries and the European Union (the "EU"). Currently, we are required in the U.S. and in foreign countries to obtain approval from those countries' regulatory authorities before we can market and sell our products in those countries. The success of our current and future products will depend in part upon obtaining and maintaining regulatory approval to market products in approved indications in the U.S. and foreign markets. In our experience, the regulatory approval process is a lengthy and complex process, both in the U.S. and in foreign countries, including countries in the EU. Even if we obtain regulatory approval, both our manufacturing processes and our marketed products are subject to continued review. Later discovery of previously unknown problems with our products or manufacturing processes may result in restrictions on such products or manufacturing processes, including withdrawal of the products from the market. Our failure to obtain necessary approvals, or the restriction, suspension or revocation of any approvals, or our failure to comply with regulatory requirements could prevent us from manufacturing or selling our products which could have a material adverse effect on us and our results of operations.

#### Reimbursement; Third party payors

In both domestic and foreign markets, sales of our products are dependent, in part, on the availability of reimbursement from third party payors such as state and federal governments (for example, under Medicare and Medicaid programs in the U.S.) and private insurance plans. In certain foreign markets, the pricing and profitability of our products generally are subject to government controls. In the U.S., there have been, and we expect there will continue to be, a number of state and federal proposals that limit the amount that state or federal governments will pay to reimburse the cost of drugs. In addition, we believe the increasing emphasis on managed care in the U.S. has and will continue to put pressure on the price and usage of our products, which may impact product sales. Further, when a new therapeutic is approved, the reimbursement status and rate of such a product is uncertain. In addition, current reimbursement policies for existing products may change at any time. Changes in reimbursement or our failure to obtain reimbursement for our products may reduce the demand for, or the price of, our products, which could result in lower product sales or revenues which could have a material adverse effect on us and our results of operations. For example, in the U.S. the use of

EPOGEN(R) in connection with treatment for end stage renal disease is funded primarily by the U.S. federal government. Therefore, as in the past, EPOGEN(R) sales could be affected by future changes in reimbursement rates or the basis for reimbursement by the federal government. For example, in early 1997, HCFA instituted a reimbursement change for EPOGEN(R) which adversely affected the Company's EPOGEN(R) sales, until the policies were revised. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations -Results of Operations - Product sales - EPOGEN(R) (Epoetin alfa)."

#### Guidelines

Government agencies promulgate regulations and guidelines directly applicable to us and to our products. However, professional societies, practice management groups, private health/science foundations and organizations involved in various diseases may also publish, from time to time, guidelines or recommendations to the health care and patient communities. These organizations may make recommendations that affect a patient's usage of certain therapies, drugs or procedures, including our products. Recommendations of government agencies or these other groups/organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines that are followed by patients and health care providers could result in, among other things, decreased use of our products which could have a material adverse effect on our results of operations. In addition, the perception by the investment community or stockholders that such recommendations or guidelines will be followed could adversely affect prevailing market prices for our common stock.

#### Intellectual property and legal matters

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and often involve complex legal, scientific and factual questions. To date, there has emerged no consistent policy regarding breadth of claims allowed in such companies' patents. Accordingly, the patents and patent applications relating to our products, product candidates and technologies may be challenged, invalidated or circumvented by third parties and might not protect us against competitors with similar products or technology. For certain of our product candidates, there are third parties who have patents or pending patents that they may claim prevent us from commercializing these product candidates in certain territories. Patent disputes are frequent and can preclude commercialization of products. We are currently, and in the future may be, involved in patent litigation. The results of such litigation could subject us to competition and/or significant liabilities, could require us to enter into third party licenses or could cause us to cease using the technology or product in dispute. In addition, we cannot guarantee that such licenses will be available on terms acceptable to us.

The Company is currently involved in arbitration proceedings with Ortho Pharmaceutical Corporation (which has assigned its rights under the Product License Agreement to Ortho Biotech, Inc.), a subsidiary of Johnson & Johnson ("Johnson & Johnson"), relating to a license granted by the Company to Johnson & Johnson for sales of Epoetin alfa in the U.S. for all human therapeutic uses except dialysis. See Note 4 to the Consolidated Financial Statements, "Contingencies - Johnson & Johnson arbitrations".

#### Competition

We operate in a highly competitive environment. Our principal competitors are pharmaceutical and biotechnology companies. Some of our competitors, mainly large pharmaceutical corporations, have greater clinical, research, regulatory and marketing resources than we do. In addition, some of our competitors may have technical or competitive advantages over us for the development of technologies and processes and may acquire technology from academic institutions, government agencies and other private and public research organizations. We cannot guarantee that we will be able to produce or acquire rights to products that have commercial potential. Even if we achieve successful product commercialization, we cannot guarantee that one or more of our competitors will not achieve product commercialization earlier than we do, obtain patent protection that dominates or adversely affects our activities, or have significantly greater marketing capabilities.

#### Fluctuations in operating results

Our operating results may fluctuate from period to period for a number of reasons. In budgeting our operating expenses, some of which are fixed in the short term, we assume that revenues will continue to grow. Accordingly, even a relatively small revenue shortfall may cause a period's results to be below our expectations. A revenue shortfall could arise from any number of factors, such as:

- - lower than expected demand for our products
- - changes in the government's or private payor's reimbursement policies for our products
- - changes in wholesaler buying patterns
- - increased competition from new or existing products
- - fluctuations in foreign currency exchange rates
- - changes in our product pricing strategies

Of course, there may be other factors that affect the Company's revenues in any given period.

#### Rapid growth

We have an aggressive growth plan that includes substantial and increasing investments in research and development and facilities. Our plan has a number of risks, such as:

- - the need to generate higher revenues to cover a higher level of operating expenses
- - the need to attract and assimilate a large number of new employees
- - the need to manage complexities associated with a larger and faster growing organization
- - the need to accurately anticipate demand for the products we manufacture and maintain adequate manufacturing capacity

Of course, there may be other risks and we cannot guarantee that we will be able to successfully manage these or other risks.

#### Stock price volatility

Our stock price, like that of other biotechnology companies, is highly volatile. Our stock price may be affected by, among other things, clinical trial results and other product-development announcements by us or our competitors, regulatory matters, announcements in the scientific and research community, intellectual property and legal matters, changes in reimbursement policies or medical practices or broader industry and market trends unrelated to our performance. In addition, if our revenues or earnings in any period fail to meet the investment community's expectations, there could be an immediate adverse impact on our stock price.