9-30-85

PRODUCT LICENSE AGREEMENT

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:

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

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) 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

LICENSE

2.01 GRANT

(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

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

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

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

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

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

2.07 IMPROVEMENTS

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

(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

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

4.01 PAYMENTS

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

A. With respect to EPO:

(i) ORTHO shall pay AMGEN of its NET SALES in the United States of EPO LICENSED PRODUCTS;

REDACTED

(ii) ORTHO shall retain for its own benefit of its NET SALES in the United States of EPO LICENSED PRODUCTS; REDACTED

(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: REDACTED

(a) the equivalent of up to of the EPO royalty payments made by ORTHO to AMGEN under paragraph 5.01 of the TECHNOLOGY LICENSE AGREEMENT, provided that no more than of said total payments shall be recoverable by ORTHO in any one (1) calendar year. REDACTED

(b) the equivalent of up to 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. REDACTED

(c) the equivalent of up to 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 of NET SALES in the United States of EPO LICENSED PRODUCTS. REDACTED

(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:

(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:

(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

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

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

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

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

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

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

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

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

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

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 AFFILATE 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

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

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

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

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

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 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 souce 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 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

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

ENFORCEMENT

8.01 INFRINGEMENT BY ORTHO

(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

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 appropriatesuit 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

TERM AND TERMINATION

9.01 TERM

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

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

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

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

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

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

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):

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

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

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.

10.08 GOVERNING LAW

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

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

10.10 NUMBER AND GENDER

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

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

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. Offfice 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

Robert D Weist
Witness

By George B. Rathmann
George B. Rathmann, President

ORTHO PHARMACEUTICAL CORPORATION
a New Jersey corporation

Dennis N. Forgatieri
Witness

By 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* ile thr thr gly cys ala

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

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

DESCRIPTION OF HEPATITIS B

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

DESCRIPTION OF INTERLEUKIN-2

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

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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 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

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 Austria Belgium France Germany Italy Luxembourg Netherlands Sweden Switzerland Liechtenstein United Kingdom	84.109537.5	8/10/84
-CIP-2	L. Souza Y. Stabinsky	Microbial Expression of Interleukin II	U.S.	717,334	3/29/85