SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): November 26, 2001

ISIS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-19125

(Commission File No.)

33-0336973 (IRS Employer Identification No.)

2292 Faraday Avenue Carlsbad, CA 92008 (Address of Principal Executive Offices and Zip Code)

Registrant's telephone number, including area code: (760) 931-9200

Item 5. Other Events.

On November 26, 2001, Isis Pharmaceuticals, Inc. announced a Collaboration and Co-development Agreement between Isis and OncoGenex Technologies Inc., a Canadian oncology-focused research and development company, for the development and commercialization of OGX-011. The Collaboration combines OncoGenex's proprietary antisense position in inhibitors with Isis' proprietary second-generation antisense chemistry.

Item 7. Exhibits.

10.1* Collaboration and Co-development Agreement, dated November 16, 2001, between Isis Pharmaceuticals, Inc. and OncoGenex Technologies Inc.

99.1 Press Release dated November 26, 2001.

* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ISIS PHARMACEUTICALS, INC.

Dated: December 11, 2001

By: /s/ B. LYNNE PARSHALL

B. LYNNE PARSHALL Executive Vice President,

Chief Financial Officer and Director

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Item 5. Other Events. Item 7. Exhibits.

SIGNATURE INDEX TO EXHIBITS

Exhibit 10.1

CONFIDENTIAL TREATMENT REQUESTED UNDER 17 C.P.R. §§200.80(b)4 AND 240.24b-2

COLLABORATION AND CO-DEVELOPMENT AGREEMENT

THIS COLLABORATION AND CO-DEVELOPMENT AGREEMENT ("Agreement") is made and entered into effective as of November 16, 2001 (the "Effective Date"), by and among ONCOGENEX TECHNOLOGIES INC., having offices at Suite 400, 609 - 14th Street N.W., Calgary, Alberta T2N 2A1 ("OncoGenex") and ISIS PHARMACEUTICALS, INC., having principal offices at 2292 Faraday Avenue, Carlsbad CA 92008 ("Isis"). OncoGenex and Isis each may be referred to herein individually as a "Party," or collectively as the "Parties."

WHEREAS, Isis and OncoGenex wish to establish a relationship to co-develop and commercialize an antisense compound targeted to Clusterin, on the terms set forth below;

NOW, THEREFORE, the Parties do hereby agree as follows:

ARTICLE 1—DEFINITIONS

Capitalized terms used in this Agreement and not otherwise defined herein have the meanings set forth in Appendix 1.

ARTICLE 2— SCOPE OF COLLABORATION; COLLABORATION ACTIVITIES

Section 2.1 Scope of Collaboration. The Parties have entered into this collaboration (the "Collaboration") to jointly develop and commercialize the Product as set forth in this Agreement.

Section 2.2 Collaboration Activities.

2.2.1 **General.** The Parties will use Commercially Reasonable Efforts to conduct their respective Collaboration Activities in accordance with this Agreement, and in accordance with the Initial Project Plan and any future Project Plans. Each Party will perform, or cause to be performed, its Collaboration Activities in good scientific manner, and in compliance in all material respects with all Applicable Law and will use best efforts to (a) research, develop, manufacture, file for Regulatory Approval and commercialize the Product, (b) perform the work of each Project Plan with the view to achieving the objectives of such Project Plan efficiently and expeditiously by allocating sufficient time, effort, equipment and skilled personnel to complete such activities successfully and promptly, and (c) cooperate fully with the other Party to achieve the goals of the Collaboration.

2.2.2 Collaboration Exclusivity. During the Term of this Agreement, neither Party will engage, on behalf of itself or any other party, in the development or commercialization of antisense compounds targeted to Clusterin other than as provided in this Agreement.

Section 2.3 Initial Project Plan.

2.3.1 **Goals of Initial Project Plan.** The Initial Project Plan will be directed to completing Trial 1 and Trial 2, as set forth in Appendix 2.3.1. The Parties' responsibilities for Collaboration Activities for the Initial Project Plan are set forth in Appendix 2.3.1. Collaboration Activities for the Initial Project Plan will be funded as set forth in Appendix 2.3.1.

*CONFIDENTIAL TREATMENT REQUESTED

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2.3.2 Changes to Initial Project Plan. Any changes to the Initial Project Plan requiring the performance of additional activities will require the prior written approval of both Parties and will be funded [***] by OncoGenex and [***] by Isis, unless otherwise agreed by the Parties. Any such changes to the Initial Project Plan will include a budget covering any additional activities.

2.3.3 Licensing of Product. The Product will not be sublicensed to any Third Party prior to completion of the Initial Project Plan, without mutual agreement of the Parties in writing.

2.3.4 Discontinued Performance by OncoGenex. If OncoGenex elects during performance of the Initial Project Plan to discontinue its participation in the Collaboration, Isis may continue the development and commercialization of the Product independently of OncoGenex. Upon discontinuation of performance of the Initial Project Plan by OncoGenex, Isis will retain any licenses granted in Section 4.1, including the right to sublicense as provided in that section. Isis will pay OncoGenex a royalty equal to [****] of Net Sales of the Product for the life of the Product. In addition, Isis will pay OncoGenex will transfer to Isis all information relating to the Product as may be necessary to enable Isis to practice the licenses granted in Section 4.1, including, but not limited to, summaries of clinical trials, rights to all foreign-equivalent INDs and NDAs filed with respect to the Product in such country and all drug dossiers and master files with respect thereto. OncoGenex will have no further expense obligations under this Agreement.

2.3.5 Discontinued Performance by Isis. If Isis elects during performance of the Initial Project Plan to discontinue its participation in the Collaboration, OncoGenex may continue the development and commercialization of the Product independently of Isis. Upon discontinuation of performance of the Initial Project Plan by Isis, OncoGenex will retain any licenses granted in Section 4.1, including the right to sublicense as provided in that section. OncoGenex will pay Isis a royalty equal to [***] of Net Sales of the Product for the life of the Product. In addition, OncoGenex will pay Isis

any applicable Third Party Payments. Isis will transfer to OncoGenex all information relating to the Product as may be necessary to enable OncoGenex to practice the licenses granted in Section 4.1, including, but not limited to, summaries of clinical trials, rights to all foreign-equivalent INDs and NDAs filed with respect to the Product in such country and all drug dossiers and master files with respect thereto. Isis will have no further expense obligations under this Agreement.

Section 2.4 Future Collaboration Activities.

2.4.1 **Proportionate Share.** After completion of the Initial Project Plan, the Proportionate Share of OncoGenex and Isis will be [***] and [***] respectively.

2.4.2 Future Project Plans. Ninety days prior to estimated completion of the Initial Project Plan, and 90 days prior to estimated completion of each subsequent Project Plan, the Operating Committee will establish a new Project Plan for the next stage of development of the Product. Upon written acceptance of a new Project Plan by each of the Parties, such Project Plan will be appended to this Agreement. Each new Project Plan will include a budget for the Collaboration Activities to complete such Project Plan, and provisions for the Parties to fund the Collaboration Activities according to their Proportionate Share.

2.4.3 Third Party or Unilateral Product Development. If the Parties cannot agree to the terms of a new Project Plan, the Parties will negotiate in good faith for one Party to unilaterally develop the Product, or will agree to jointly sub-license the Product to a Third Party. If the Parties cannot reach agreement regarding the principal terms for unilateral development or sub-licensing of the Product within 120 days of beginning negotiations, the Parties will refer the matter to dispute resolution according to the procedures set forth in Section 12.6.

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2.4.4 Licensing of Product.

(a) No Third Party negotiations will be undertaken in respect of the Product by either Party unless agreed to by each of the Parties. The Party that introduces the Third Party to such negotiations will continue as the negotiating lead.

(b) Net Licensing Revenue received as a result of a licensing or other collaboration agreement with a Third Party will be shared by the Parties in accordance with Article 5.

2.4.5 Manufacturing of the Product. With respect to clinical and commercial supplies of the Product for the performance of future Project Plans, the Operating Committee will use its best efforts to enter into a supply agreement with the supplier that is best able to meet the Parties' requirements, taking into consideration such factors as price, timing, quality, capacity, quantity, reliability and reputation. Such supplier may be either a Third Party or one of the Parties.

ARTICLE 3— OPERATION OF THE COLLABORATION

Section 3.1 Operating Committee.

3.1.1 **Formation of Operating Committee**. The Parties will establish a joint committee (the "Operating Committee"), which will oversee the Collaboration and development and commercialization activities as described hereunder. Each of OncoGenex and Isis will appoint 2 representatives with the requisite experience and seniority to enable them to fulfill the obligations of the Operating Committee with respect to the Collaboration. Additional representatives of each Party will be free to attend the Operating Committee meetings, but not to vote. From time to time, OncoGenex and Isis each may substitute any of its representatives to the Operating Committee with notice to the other Party and to the members of the Operating Committee. Each Party will ensure that each member of the Operating Committee is bound by the obligations of confidence in accordance with Article 6.

3.1.2 Operating Committee Responsibilities. The Operating Committee will, in addition to its other responsibilities described in this Agreement: (a) periodically review the Project Plan from a strategic and scientific perspective, and present opinions to the Parties; (b) make changes to Project Plans as it deems necessary to accomplish the purpose of the Collaboration, and, recommend to the Parties allocation of responsibilities for Collaboration Activities between OncoGenex and Isis necessary to implement the Project Plans, taking into consideration the Parties' relevant expertise and available resources and relevant Project Plans and budgets; (c) prioritize for the Parties the research, development, manufacturing and commercialization activities with respect to the Product; (d) attempt to resolve any disagreements between the Parties with respect to the research conducted under the Collaboration; (e) monitor, at least on a quarterly basis, Collaboration Activities conducted and expenses incurred sufficient to insure that progress and expense contribution are in accordance with Project Plan; and (f) take such other actions as are set forth in this Agreement or as the Parties may mutually agree.

3.1.3 Procedural Rules for the Operating Committee.

(a) Generally. Except as explicitly set forth in this Agreement, the Operating Committee will establish its own procedural rules for its operation.

(b) Voting. The Operating Committee will take action by unanimous agreement of the members of the Operating Committee. In the event that unanimous agreement cannot be achieved within 20 days, the matter will be resolved according to the procedures set forth in Section 3.2.

Section 3.2 **Dispute Resolution.** Any dispute that may arise relating to the terms of this Agreement or the activities of the Parties hereunder will be brought to the attention of the Operating Committee, which will attempt in good faith to achieve a resolution. Either Party may convene a

special meeting of the Operating Committee for the purpose of resolving disputes. If the Operating Committee is unable to resolve such a dispute within 20 days of the first presentation of such dispute to the Operating Committee, such dispute will be referred to the Chief Executive Officers of each of the Parties (or their respective designees) who will use their good faith efforts to mutually agree upon the resolution of the dispute. If any dispute is not resolved by the Chief Executive Officers of the Parties (or their designees) within 30 days after such dispute is referred to them, then either Party will have the right, with respect to a Party's interpretation of, or performance under, this Agreement, to arbitrate such dispute in accordance with Section 12.6.

ARTICLE 4— GRANT OF RIGHTS

Section 4.1 License Grants for Collaboration Activities.

4.1.1 **Isis Grant.** Subject to the terms and conditions of this Agreement, Isis hereby grants to OncoGenex (a) a co-exclusive (with Isis), worldwide, fully-paid, royalty-free license, under the Joint Patents and Product-Specific Technology Patents, and (b) a non-exclusive, worldwide, royalty-free license under the Isis Core Technology Patents, both licenses solely to develop, make, have made, use, sell, offer for sale, have sold and import the Product. The license granted hereunder will be sublicensable only in connection with a license of the Product to a Third Party in accordance with the terms of this Agreement.

4.1.2 OncoGenex Grant. Subject to the terms and conditions of this Agreement, including without limitation Section 4.2, OncoGenex hereby grants to Isis a co-exclusive (with OncoGenex), worldwide, fully-paid, royalty-free license, or sub-license, as the case may be, under the OncoGenex Product Patents, the Joint Patents, and the Product-Specific Technology Patents, solely to develop, make, have made, use, sell, offer for sale, have sold and import the Product. The license granted hereunder will be sublicensable only in connection with a license of the Product to a Third Party in accordance with the terms of this Agreement.

4.1.3 Isis Manufacturing Patents. Isis will grant to OncoGenex or to a Third Party manufacturer pursuant to Section 2.4.5 a non-exclusive, worldwide, fully-paid, royalty-free license, under the Isis Manufacturing Patents to make or have made the Product only upon a determination by the Operating Committee to have OncoGenex or such Third Party manufacture the Product; or upon discontinuance of performance by Isis and unilateral development of the Product by OncoGenex or a Third Party sublicensee under Section 2.4.3; or upon unilateral development of the Product by OncoGenex or a Third Party sublicensee under Section 2.4.3; or upon unilateral development of the Product by OncoGenex of this Agreement in accordance with Article 9 hereof.

4.1.4 Improvements. If any Improvement that is not Product-Specific Technology is made during the Collaboration, the Parties will negotiate in good faith regarding the use of any such Improvement in the Collaboration. If the Parties agree to terms under which such Improvement will be used in the Collaboration, the Party owning the Improvement will grant to the other Party a license under the Improvement solely to develop, make, have made, use, sell, offer for sale, have sold and import the Product. The license granted hereunder will be sublicensable only in connection with a license of the Product to a Third Party in accordance with the terms of this Agreement.

Section 4.2 **Pre-Existing Grants.** The Parties further acknowledge and agree that pursuant to the [***] co-development letter of intent, OncoGenex has or intends to grant an exclusive license under the OncoGenex Product Patents to develop and commercialize a topical/intratumoral antisense compound designed to interact with Clusterin and the Parties acknowledge that OncoGenex is free to do so

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without breach of this Agreement. No rights to Isis Patent Rights, Joint Technology, or Product-Specific Technology may be granted, expressly or implied, by OncoGenex to [***]

ARTICLE 5— FINANCIAL PROVISIONS

Section 5.1 **Payment by OncoGenex.** OncoGenex will pay [***] to Isis within 30 days of the Effective Date. Such payment will be for approximately [***] of Product to support the [***]. All other expenses incurred by Isis in respect of Isis' Collaboration Activities as set forth in the Initial Project Plan shall be borne solely by Isis.

Section 5.2 Licenses from Third Parties.

5.2.1 Third Party Payments. OncoGenex acknowledges that Isis entered into a license agreement with [***], and a license agreement with [***], under which Isis is obligated to pay royalties and milestones on the Product. Isis acknowledges that OncoGenex entered into a license agreement with University of British Columbia dated November 1, 2001, under which OncoGenex is obligated to make payments with respect to the Product. The Third Party Payments identified in this Section 5.2.1 will be determined in accordance with the terms of the referenced license agreements. In the event that either Party negotiates reduced royalties or milestones with these Third Party licensors, the royalties and milestones due under the original license agreements will still be paid to Isis or OncoGenex as the case may be.

Section 5.3 **Product Licensing Revenue Allocation.** Licensing Revenue will be allocated as follows: first, each Party will receive any Third Party Payments owing to its licensors in respect of the Product, then each Party will receive its Proportionate Share of the Net Licensing Revenue. In the event that one Party receives all Licensing Revenue, then such receiving Party will distribute the Licensing Revenue to the non-receiving Party in accordance with the immediately preceding sentence within 15 days after receipt of such Licensing Revenue.

Section 5.4 Sharing of Third Party Payments. During the Initial Project Plan, each Party will be responsible for any Third Party Payments owing to its licensors. Following completion of the Initial Project Plan, any Third Party Payments owing in respect of the Product will be shared by the Parties according to their Proportionate Share.

Section 5.5 Revenue Sharing on Direct Sales. The Party marketing the Product will: first, subtract expenses from Revenues received from the Product; second, pay or distribute Third Party Payments; and third, distribute the remaining Revenue to the Parties according to their Proportionate Shares. The Party marketing the Product will distribute Revenue within 30 days after the end of each calendar quarter. In the event that expenses from marketing the Product are greater than Revenues received, the Parties will divide such expenses that are in excess of Revenues, according to their Proportionate Shares.

Section 5.6 Payment Method. Any amounts due to a Party hereunder will be paid in Canadian dollars if paid to OncoGenex, and in U.S. dollars if paid to Isis, by wire transfer in immediately available funds to an account designated by the receiving Party. Any payments or portions thereof due hereunder which are not paid on the date such payments are due under this Agreement will bear interest at a rate equal to the lesser of the prime rate as published in *The Wall Street Journal*, Eastern Edition, on the first day of each calendar quarter in which such payments are overdue, plus two percent (2%), or the maximum rate permitted by law, whichever is lower, calculated on the number of days such payment is delinquent, compounded monthly.

Section 5.7 Currency; Foreign Payments. If any currency conversion will be required in connection with any payment hereunder, such conversion will be made by using the exchange rate for the purchase of U.S. dollars as published in *The Wall Street Journal*, Eastern Edition, or for the

purchase of Canadian dollars as published by the Royal Bank of Canada, on the last business day of the calendar quarter to which such payments relate. If at any time legal restrictions prevent the prompt remittance of any payments in any jurisdiction, the applicable Party may notify the other and make such payments by depositing the amount thereof in local currency in a bank account or other depository in such country in the name of the receiving Party or its designee, and such Party will have no further obligations under this Agreement with respect thereto.

Section 5.8 Taxes. A Party may deduct from any amounts it is required to pay to the other Party pursuant to this Agreement an amount equal to that withheld for or due on account of any taxes (other than taxes imposed on or measured by net income) or similar governmental charge imposed on the receiving Party by a jurisdiction of the paying Party ("Withholding Taxes"). The paying Party will provide the receiving Party a certificate evidencing payment of any Withholding Taxes hereunder within 30 days of such payment and will reasonably assist the receiving Party, at the receiving Party's expense, to obtain the benefit of any applicable tax treaty.

Section 5.9 Records Retention; Audit.

5.9.1 Regulatory Records. With respect to the subject matter of this Agreement, each Party will maintain, or cause to be maintained, records of its respective research, development, manufacturing and commercialization activities, including all Regulatory Documentation, in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes, which will be complete and accurate and will fully and properly reflect all work done and results achieved in the performance of such activities. All Regulatory Documentation will be retained for a period as may be required by Applicable Law. Each Party will have the right, during normal business hours and upon reasonable notice, to inspect and copy any such records.

5.9.2 Record Retention. Each Party will maintain (and will ensure that its sublicensees will maintain) complete and accurate books, records and accounts that fairly reflect (a) their respective costs and expenses reimbursable or otherwise shared by the Parties hereunder (collectively, the "Collaboration Expenses"), and (b) Revenue with respect to the Product, in each case in sufficient detail to confirm the accuracy of any payments required hereunder and in accordance with GAAP, which books, records and accounts will be retained by such party until the later of (i) 3 years after the end of the period to which such books, records and accounts pertain, and (ii) the expiration of the applicable tax statute of limitations (or any extensions thereof), or for such longer period as may be required by Applicable Law.

5.9.3 Audit. Each Party will have the right to have an independent certified public accounting firm of nationally recognized standing, reasonably acceptable to the audited Party, have access during normal business hours, and upon reasonable prior written notice, to such of the records of the other Party (and its sublicensees) as may be reasonably necessary to verify the accuracy of Collaboration Expenses or Revenues, as applicable, for any calendar quarter or calendar year ending not more than 24 months prior to the date of such request; provided, however, that neither Party will have the right to conduct more than one such audit in any Calendar Year except as provided below. The requesting Party shall bear the cost of such audit unless the audit reveals a variance of more than 5% from the reported results, in which case the audited Party shall bear the cost of the audit. The requesting Party will have the right to audit previous years, if such years have not been previously audited, if the audit reveals a variance of more than 5% from the reported results. The requesting Party will bear the cost of such audit bear the cost of such audit of such are such as such audits reveal a variance of more than 5%. The results of such accounting firm shall be final and binding upon the Parties, absent manifest error.

5.9.4 Payment of Additional Amounts. If, based on the results of such audit, additional payments are owed by the audited Party under this Agreement, the audited Party will make such

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additional payments, with interest from the date originally due at the rate of 1% per month, within 60 days after the date on which such accounting firm's written report is delivered to such Party.

5.9.5 Confidentiality. The auditing Party will treat all information subject to review under this Section 5.9 in accordance with the confidentiality provisions of Article 6 and will cause its accounting firm to enter into a reasonably acceptable confidentiality agreement with the audited Party obligating such firm to maintain all such financial information in confidence pursuant to such confidentiality agreement.

ARTICLE 6— CONFIDENTIALITY

Section 6.1 Disclosure and Use Restriction. Except as expressly provided herein, the Parties agree that, for the Term and for five (5) years thereafter, each Party will keep completely confidential and will not publish, submit for publication or otherwise disclose, and will not use for any purpose except for the purposes contemplated by this Agreement, any Confidential Information received from the other Party.

6.1.1 Authorized Disclosure. Each Party may disclose Confidential Information of the other Party to the extent that such disclosure is:

(a) made in response to a valid order of a court of competent jurisdiction; provided, however, that such Party will first have given notice to such other Party and given such other Party a reasonable opportunity to quash such order and to obtain a protective order requiring that the Confidential Information and documents that are the subject of such order be held in confidence by such court or agency or, if disclosed, be used only for the purposes for which the order was issued; and provided further that if a disclosure order is not quashed or a protective order is not obtained, the

Confidential Information disclosed in response to such court or governmental order will be limited to that information which is legally required to be disclosed in response to such court or governmental order;

(b) otherwise required by law; provided, however, that the disclosing Party will provide such other Party with notice of such disclosure in advance thereof to the extent practicable;

(c) made by such Party to the Regulatory Authorities as required in connection with any filing, application or request for Regulatory Approval; provided, however, that reasonable measures will be taken to assure confidential treatment of such information;

(d) made by such Party, in connection with the performance of this Agreement, to permitted sublicensees, licensors, directors, officers, employees, consultants, representatives or agents, each of whom prior to disclosure must be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 6; or

(e) made by such Party to existing or potential acquirers; existing or potential pharmaceutical collaborators (to the extent contemplated hereunder); investment bankers; existing or potential investors, merger candidates, partners, venture capital firms or other financial institutions or investors for purposes of obtaining financing; or, bona fide strategic potential partners; each of whom prior to disclosure must be bound by obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 6.

Section 6.2 **Press Releases.** Press releases or other similar public communication by either Party relating to this Agreement, will be approved in advance by the other Party, which approval will not be unreasonably withheld or delayed, except for those communications required by Applicable Law, disclosures of information for which consent has previously been obtained, and information of a similar nature to that which has been previously disclosed publicly with respect to this Agreement, each of which will not require advance approval, but will be provided to the other Party as soon as practicable after the release or communication thereof.

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Section 6.3 Publications. The Parties acknowledge that scientific lead-time is a key element of the value of the research and development activities under the Collaboration and further agree that scientific publications must be strictly monitored to prevent any adverse effect from premature publication or disclosure of results of the research or development activities hereunder. At least 45 days prior to submission of any material related to the research or development activities hereunder for publication or presentation, the submitting Party will provide to the other Party a draft of such material for its review and comment. The receiving Party will provide any comments to the submitting Party within 30 days of receipt of such materials. No publication or presentation have been addressed and changes have been received and agreed upon and any information determined by the other Party to be Confidential Information has been removed. If requested in writing by the other Party, the submitting Party will withhold material from submission for publication or presentation for a reasonable time to allow for the filing of a patent application or the taking of such measures to establish and preserve proprietary rights in the information in the material being submitted for publications and presentations. Each Party will reasonably review proposed publications and presentations submitted by the other Party as promptly as possible and will not unreasonably withhold its consent to such publications or presentations that have been submitted for review with less than the required notice period.

ARTICLE 7— INTELLECTUAL PROPERTY

Section 7.1 Intellectual Property Ownership.

7.1.1 Ownership of Intellectual Property. Ownership of inventions conceived or reduced to practice as part of the Collaboration will be determined in accordance with the rules of inventorship under United States patent laws. Isis will own all inventions conceived of and reduced to practice as part of the Collaboration solely by its employees and agents, and all Patents claiming such inventions. OncoGenex will own all inventions conceived of and reduced to practice as part of the Collaboration solely by its employees and agents, and all Patents claiming such inventions. All inventions conceived of and reduced to practice jointly by employees or agents of Isis and employees or agents of OncoGenex, and all Patents claiming such inventions, will be owned jointly by Isis and OncoGenex. During the Term of this Agreement, each Party shall promptly disclose in writing to the other Party on an ongoing basis, and prior to filing any Patent, any Joint Technology or Product-Specific Technology invented as part of the Collaboration.

7.1.2 Ownership of Regulatory Documentation. All Regulatory Approvals with respect to the Product will be owned by OncoGenex for the duration of the Collaboration. If the Collaboration terminates, or if one Party discontinues performance according to the terms of this Agreement, all Regulatory Approvals will remain with the Party that has retained the rights to the Product.

Section 7.2 Prosecution of Patents.

7.2.1 Isis Rights. Isis will, subject to Section 7.2.3 and Section 7.2.5, have the sole right, at its cost and expense and at its sole discretion, to obtain, prosecute and maintain throughout the World the Isis Patent Rights. OncoGenex shall reimburse Isis for its Proportionate Share of the reasonable out-of-pocket costs incurred to obtain, prosecute and maintain throughout the world, any Product- Specific Technology Patents Controlled by Isis. Isis will keep OncoGenex informed of all Product-Specific Technology Patent applications and registrations to be filed by Isis, and OncoGenex shall have the right to comment on such applications within the timeframes of the patent filing process and deadlines. Notwithstanding the foregoing, if OncoGenex is unilaterally developing and commercializing the Product in accordance with Section 2.3.5, Section 2.4.3, or Article 9, OncoGenex will have the first right to file, prosecute and maintain any Product-Specific Technology Patents at its expense. If OncoGenex elects not to (a) pursue the filing, prosecution or maintenance of a Product-Specific Technology Patents in a particular country, (b) take any other action with respect to Product-Specific Technology in a particular country that is necessary or reasonably useful to establish or preserve rights thereto, then in each such case OncoGenex will so notify Isis promptly in writing and in good time to enable Isis to meet any deadlines by which an action must be taken to establish or preserve any rights in such Product-Specific Technology in such country, and Isis will have the right, but not the obligation, to pursue the filing or registration, or support the continued prosecution or maintenance, of such Product-Specific Technology Patents, at its expense in such country.

7.2.2 OncoGenex Rights. OncoGenex will, subject to Section 7.2.3 and Section 7.2.5, have the sole right and at its sole discretion, to obtain, prosecute and maintain throughout the world the OncoGenex Patent Rights. Isis shall reimburse OncoGenex for its Proportionate Share of the reasonable out-of-pocket costs incurred to obtain, prosecute and maintain throughout the world, any OncoGenex Product Patents and Product-Specific Technology Patents Controlled by OncoGenex. OncoGenex will keep Isis informed of all OncoGenex Product Patent and Product-Specific Technology Patent applications and registrations to be filed by Oncogenex, and Isis shall have the right to comment on such applications within the timeframes of the patent filing process and deadlines. Notwithstanding the foregoing, if Isis is unilaterally developing and commercializing the Product in accordance with Section 2.3.4, Section 2.4.3, or Article 9, Isis will have the first right to file, prosecute and maintain any Product-Specific Technology Patents at its expense. If Isis elects not to (a) pursue the filing, prosecution or maintenance of a Product-Specific Technology Patents in a particular country, (b) take any other action with respect to Product-Specific Technology in a particular country that is necessary or reasonably useful to establish or preserve rights thereto, then in each such case Isis will so notify OncoGenex promptly in writing and in good time to enable OncoGenex to meet any deadlines by which an action must be taken to establish or preserve any rights in such Product-Specific Technology in such country, and OncoGenex will have the right, but not the obligation, to pursue the filing or registration, or support the continued prosecution or maintenance, of such Product-Specific Technology Patents, at its expense in such country. Upon unilateral development and commercialization by Isis, the Parties will negotiate for Isis to have the right to control the prosecution of the OncoGenex Product Patents. At a minimum, Isis will have the right to comment on the prosecution of the OncoGenex Product Patents, and to request countries for foreign filings related thereto. OncoGenex will keep Isis informed of all prosecution matters regarding OncoGenex Product Patents promptly to allow Isis sufficient time to comment within the timeframes of the patent prosecution process and deadlines.

7.2.3 Filing of Joint Patents. Subject to Section 7.2.5, the Parties will cooperate with one another with respect to the filing, prosecution and maintenance of all Joint Patents. The Parties will designate one of the Parties to be responsible for, and to initially bear the expense of, the preparation, filing, prosecution, and maintenance of a Joint Patent, provided that the responsible

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Party will be entitled to reimbursement by the other Party of the responsible Party's expenses as follows: i) Proportionate Share of such expenses if the Joint Patent is a Product-Specific Technology Patent, or ii) equal sharing of such expenses if the Joint Patent is not a Product-Specific Technology Patent. The responsible Party will consult with the other Party as to the preparation, filing, prosecution, and maintenance of such Joint Patent reasonably prior to any deadline or action with the U.S. Patent & Trademark Office or any foreign patent office, and will furnish to the other party copies of all relevant documents reasonably in advance of such consultation. For the life of the Joint Patents, the Parties will mutually agree upon all Joint Patent filings. Not withstanding the foregoing, if one Party is unilaterally developing and commercializing the Product in accordance with Section 2.3.4, section 2.3.5, or Section 2.4.3, or Article 9, the Party continuing with the development and commercialization of the Product (for purposes of this Section only, the "Continuing Party") will have the first right to file, prosecution or maintenance of such a Joint Patent in a particular country, (b) to take any other action with respect to such Joint Patent in a particular country that is necessary or reasonably useful to establish or preserve rights thereto, then in each such case the Continuing Party will so notify the other Party promptly in writing and in good time to enable such Party to meet any deadlines by which an action must be taken to establish or preserve any rights in such Joint Technology in such country, and such Party to meet any deadlines by which an action pursue the filing or registration, or support the continued prosecution or maintenance, of such Patent, at its expense in such country.

7.2.4 Cooperation. Each Party will cooperate fully in the preparation, filing, prosecution, and maintenance of the other Party's Patents, the Product-Specific Technology Patents and the Joint Patents. Such cooperation includes (a) promptly executing all papers and instruments and requiring employees to execute such papers and instruments as reasonable and appropriate so as to enable such other Party, to file, prosecute, and maintain its Patents in any country; and (b) promptly informing such other Party of matters that may affect the preparation, filing, prosecution, or maintenance of any such Patents.

7.2.5 Patent Filings. OncoGenex covenants not to file any patent application with respect to the Product disclosing or claiming any information disclosed or claimed in the Isis Patent Rights, without Isis's prior written consent. Isis covenants not to file any patent application disclosing or claiming any information disclosed or claimed in the OncoGenex Patent Rights without OncoGenex's prior written consent.

Section 7.3 Enforcement of Patents

7.3.1 **Rights and Procedures.** If Isis or OncoGenex determines that any Technology is being infringed by a Third Party's activities and that such infringement could affect the exercise by the Parties of their respective rights and obligations under this Agreement, it will promptly notify the other Party in writing and provide such other Party with any evidence of such infringement that is reasonably available.

(a) Joint Patents. With respect to infringement of a Joint Patent, the Party responsible for filing, prosecution and maintenance of such Joint Patent under Section 7.2.3 will have the first right to bring and control any action or proceeding with respect to such Joint Patent, and will bear all expenses thereof, and the other Party will have the right, at its own expense, to be represented in any such action; provided, however, that if the Party with the first right to bring and control actions and proceedings with respect to such Joint Patent Right fails to bring an action or proceeding within ninety (90) days following notice of such infringement, or earlier notifies the other Party in writing of its intent not to take such steps, the other Party will have the right to do so at its expense, and the first Party will have the right, at its own expense, to be represented in any such action. Notwithstanding the foregoing, if the infringement is likely

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to have a material adverse effect on the Parties' development or commercialization of the Product, the Parties will meet to determine whether to defend against such infringement based on the Joint Patents, and if the Parties mutually agree to proceed in defending such infringement based on the Joint Patents, the Parties will share in the reasonable costs incurred relating to the removal of any such infringement on a Proportionate Share basis.

(b) Product-Specific Technology Patents. With respect to Product-Specific Technology Patents, the Party owning such Patents will have the first right, but not the obligation, to remove such infringement, provided, however, that the other Party will reimburse the owner of such Patent for its Proportionate Share of the reasonable costs incurred by such owner relating to the removal of any such infringement. In the event the Party owning the Product-Specific Technology Patent fails to take commercially appropriate steps to remove any infringement of any such Product-Specific Technology Patent within ninety (90) days following notice of such infringement, or earlier notifies the other Party in writing of its intent not to take such steps, and such infringement is likely to have a material adverse effect on the Product, the other Party will have the right to do so

at its expense, and the Party owning the Product-Specific Technology Patent will have the right, at its own expense, to be represented in any such action.

(c) Isis Patent Rights and OncoGenex Patent Rights. With respect to Isis Patent Rights or OncoGenex Patent Rights, and subject to Section 7.3.1(b), the owner of such Patents will have the sole right, but not the obligation, at its own expense, to remove such infringement using commercially appropriate steps, including the filing of an infringement suit or taking other similar action, and the other Party will have the right, at its own expense, to be represented in any such action. Notwithstanding the foregoing, if the infringement is likely to have a material adverse effect on the Parties' development or commercialization of the Product, the Parties will meet to determine whether to defend against such infringement based on the Patents of one Party, and if the Parties mutually agree to proceed in defending such infringement based on the Patent rights of either Party, the Party owning the Patent will remove the infringement using commercially appropriate steps, and the Parties will share in the reasonable costs incurred relating to the removal of any such infringement on a Proportionate Share basis. Upon unilateral development and commercialization by Isis, the Parties will negotiate for Isis to have the right, at Isis's own expense, to remove infringement of the OncoGenex Product Patents. At a minimum, OncoGenex will keep Isis informed regarding infringement actions brought by OncoGenex on the OncoGenex Product Patents, and Isis will have the right to comment on such infringement actions.

(d) Cooperation. The Party not enforcing the applicable Patent will provide reasonable assistance to the other Party, including providing access to relevant documents and other evidence, making its employees available at reasonable business hours, and joining the action to the extent necessary to allow the enforcing Party to maintain the action.

7.3.2 Recovery. Any amounts recovered by either or both Parties in connection with or as a result of any action contemplated by Section 7.3.1, whether by settlement or judgment, will be used to reimburse the Parties for their reasonable costs and expenses in making such recovery (which amounts will be allocated pro rata if insufficient to cover the totality of such expenses), with any remainder being divided between the Parties according to their proportionate expenditures in the litigation; provided, however, that to the extent that any award is attributable to loss of sales of the Product, the award will first be used to reimburse the Parties for their reasonable costs and expenses in making such recovery, and any remainder will be allocated according to the Parties' Proportionate Shares.

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Section 7.4 Potential Third Party Rights.

7.4.1 Third Party Licenses. If the Parties determine that a license to a Third Party Patent is necessary to develop, manufacture, and/or commercialize the Product, the Parties will use Commercially Reasonable Efforts to obtain a license from such Third Party; provided, however, that Isis will have the first right to seek any such license necessary to practice the Isis Patent Rights and will use Commercially Reasonable Efforts to obtain such a license in its own name from such Third Party in such country, under which Isis will, to the extent permissible under such license, grant a sublicense to OncoGenex as necessary for OncoGenex to develop, make, have made, use, sell, offer for sale, have sold and import the Product. If Isis declines to seek a license for which it has the first right, OncoGenex may seek to obtain such a license, under which OncoGenex will, to the extent permissible under such license, grant a sublicense, grant a sublicense to Isis as necessary for Isis to develop, make, have made, use, sell, offer for sale, have sold and import the Product.

7.4.2 Third Party Litigation. In the event that a Third Party institutes a patent infringement suit (including any suit alleging the invalidity or unenforceability of the Patents of a Party) against either Party or both Parties during the Term of this Agreement, alleging that any of the activities hereunder infringes one or more patent or other intellectual property rights held by such Third Party (an "Infringement Suit"), the Parties will cooperate with one another in defending such suit. Isis will have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by Isis' activities at its own expense and by counsel of its own choice, and OncoGenex will have the right, at its own expense, to be represented in any such action by counsel of its own choice. OncoGenex will have the sole right to control any defense of any such claim involving alleged infringement of Third Party rights by OncoGenex's activities at its own expense and by counsel of its own choice, and Sis will have the right, at its own choice, and Isis will have the right, at its own choice, and Isis will have the right, at its own expense, to be represented in any such action by counsel of its own choice; provided, however, that, where such Infringement Suit relates to the development and commercialization of the Product, the Party controlling such Infringement Suit will keep the other Party reasonably informed of developments in any such Infringement Suit.

Section 7.5 Validity and Enforceability of Parties' Technology. The Parties agree that during the Term of this Agreement, and for [***] thereafter, neither Party will bring any action in a court of law, or otherwise challenge the validity or enforceability of the other Party's Technology.

ARTICLE 8— TERM AND TERMINATION

Section 8.1 Term. The term of this Agreement (the "Term") will commence upon the Effective Date and will continue in effect until such time as the Product is no longer being developed or commercialized hereunder, or unless terminated at an earlier date in accordance with the terms and conditions set forth in this Article 8.

Section 8.2 Termination Upon Insolvency. Either Party may terminate this Agreement if, at any time, the other Party files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of that Party or of its assets, or if such other Party proposes a written agreement of composition or extension of its debts, or if such other Party will be served with an involuntary petition against it, filed in any insolvency proceeding, and such petition will not be dismissed within 60 days after the filing thereof, or if such other Party will propose or be a party to any dissolution or liquidation, or if such other Party will make an assignment for the benefit of its creditors.

Section 8.3 **Rights in Bankruptcy.** All rights and licenses granted under or pursuant to this Agreement by Isis or OncoGenex are, and will otherwise be deemed to be, for purposes of Section 365(n) of the United States Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101 of the United States Bankruptcy Code. The Parties, as licensees of such rights under this Agreement, will retain and may fully exercise all of their rights and elections under the United States Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party under the United States Bankruptcy Code, the Party hereto that is not a Party to such proceeding will be entitled to a complete duplicate of

(or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, which, if not already in the non-subject Party's possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy proceeding upon the non-subject Party's written request therefor, unless the Party subject to such proceeding elects to continue to perform all of its obligations under this Agreement or (b) if not delivered under clause (a) above, following the rejection of this Agreement by or on behalf of the Party subject to such proceeding upon written request therefor by the nonsubject Party.

Section 8.4 Consequences of Expiration or Termination.

8.4.1 Licenses. Upon expiration of the Term of this Agreement in accordance with Section 8.1 and payment of all amounts owed pursuant to this Agreement, the licenses granted by Isis to OncoGenex, and by OncoGenex to Isis, hereunder will terminate.

8.4.2 Return of Information and Materials. Upon expiration of this Agreement pursuant to Section 8.1 or upon termination of this Agreement in its entirety by either Party pursuant to this Article 8, each Party, at the request of the other Party, will return all data, files, records and other materials in its possession or control relating to such other Party's Technology, or containing or comprising such other Party's Information and Inventions or other Confidential Information and, in each case, to which the returning Party does not retain rights hereunder (except one copy of which may be retained for archival purposes).

Section 8.5 Accrued Rights; Surviving Obligations.

8.5.1 Accrued Rights. Termination or expiration of this Agreement for any reason will be without prejudice to any rights or financial compensation that will have accrued to the benefit of a Party prior to such termination or expiration. Such termination or expiration will not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement.

8.5.2 Survival. Articles 5, 6, 10, 11 and 12 and Sections 7.1, 7.2.3, 7.3.1(a), 7.3.1(d), 7.2.4, 7.2.5, 7.3.2, and 7.5 of this Agreement and this Section 8.5 will survive expiration or termination of this Agreement for any reason.

ARTICLE 9— MATERIAL BREACH OF THIS AGREEMENT

Section 9.1 Material Breach. Failure by a Party to comply with any of its material obligations contained herein will entitle the Party not in default to give to the defaulting Party notice specifying the nature of the material breach, requiring the defaulting Party to make good or otherwise cure such default, and stating its intention to trigger the provisions of Section 9.2 if such default is not cured. If such default is not cured within 90 days after the receipt of such notice (or, if such default cannot be cured within such 90-day period, if the Party in default does not commence actions to cure such default within such period and thereafter diligently continue such actions or if such default is not otherwise cured within 90 days after the receipt of such notice), the Party not in default will be entitled, without prejudice to any of its other rights conferred on it by this Agreement, and in addition to any other remedies available to it under Section 12.6 as remedy for the breach, to continue to develop or

commercialize the Product independently of the defaulting Party in accordance with Section 9.2 hereof; provided, however, that in the event of a good faith dispute with respect to the existence of a material breach, the 90-day cure period will be stayed until such time as the dispute is resolved pursuant to Section 12.6 hereof.

Section 9.2 Consequences of Material Breach. If a Party has not remedied the material breach within the time period allowed in accordance with Section 9.1, then the Party not in default may elect, by notice to the defaulting Party, to continue to develop or commercialize the Product independently of the defaulting Party in accordance with this section.

9.2.1 Material Breach During Performance of Initial Project Plan. If an uncured material breach has occurred on or before the completion of the Initial Project Plan, and such material breach remains uncured under the terms of Section 9.1, the defaulting Party will be deemed to have elected to discontinue its participation in the Collaboration in accordance with the terms of Section 2.3.4, in the case of OncoGenex, or Section 2.3.5, in the case of Isis, and the terms of such section will apply to the Parties.

9.2.2 Material Breach After Performance of Initial Project Plan. If an uncured material breach has occurred at any point after the Initial Project Plan has been completed, the defaulting Party will be deemed to have elected to discontinue its participation in the Collaboration, and the Party not in default may continue development or commercialization of the Product independently of the defaulting Party. Upon such discontinuation of performance by the defaulting Party, the Party not in default shall retain any licenses granted to it in Section 4.1, including the right to sublicense. The Party not in default will pay the defaulting Party a royalty as agreed by the parties or as established by arbitrator in accordance with Section 12.6.3. The defaulting Party will transfer to the non-defaulting Party all information relating to the Product as may be necessary to enable the non-defaulting Party to practice the licenses granted in Section 4.1, including, but not limited to, summaries of clinical trials, rights to all foreign-equivalent INDs and NDAs filed with respect to the Product in such country and all drug dossiers and master files with respect thereto. The defaulting Party will have no future expense obligations under this Agreement.

ARTICLE 10— INDEMNIFICATION AND INSURANCE

Section 10.1 Indemnification of Isis. OncoGenex will indemnify Isis, and their respective directors, officers, employees and agents, and defend and hold each of them harmless, from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) but only to the extent arising from or occurring as a result of any and all liability suits, investigations, claims or demands by a Third Party (collectively, "Losses") arising from or occurring as a result of or in connection with (a) any material breach by OncoGenex of this Agreement, or (b) the gross negligence or willful misconduct on the part of OncoGenex or its licensees or sublicensees in performing any activity contemplated by this Agreement, except for those Losses for which Isis has an obligation to indemnify OncoGenex pursuant to Section 10.2, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

Section 10.2 **Indemnification of OncoGenex.** Isis will indemnify OncoGenex, and their respective directors, officers, employees and agents, and defend and save each of them harmless, from and against any and all Losses arising from or occurring as a result of or in connection with (a) any material breach by Isis of this Agreement, or (b) the gross negligence or willful misconduct on the part of Isis or its licensees or sublicensees in performing any activity contemplated by this Agreement, except for those Losses for which OncoGenex has an obligation to indemnify Isis pursuant to Section 10.1, as to which Losses each Party will indemnify the other to the extent of their respective liability for the Losses.

Section 10.3 Indemnification Procedure.

10.3.1 Notice of Claim. The indemnified Party will give the indemnifying Party prompt written notice (an "Indemnification Claim Notice") of any claim upon which such indemnified Party intends to base a request for indemnification under Section 10.1 or Section 10.2, but in no event will the indemnifying Party be liable for any losses that result from any delay in providing such notice. Each Indemnification Claim Notice must contain a description of the claim and the nature and amount of such loss (to the extent that the nature and amount of such loss are known at such time). The indemnified Party will furnish promptly to the indemnifying Party copies of all papers and official documents received in respect of any claim or losses. All indemnification claims in respect of a Party, its Affiliates or their respective directors, officers, employees and agents (collectively, the "Indemnitees" and each an "Indemnitee") will be made solely by such Party to this Agreement (the "Indemnified Party").

10.3.2 Third Party Claims. The obligations of an indemnifying Party under this Article 10 with respect to losses arising from claims of any Third Party that are subject to indemnification as provided for in Section 10.1 or 10.2 (a "Third Party Claim") will be governed by and be contingent upon the following additional terms and conditions:

(a) Control of Defense. At its option, the indemnifying Party may assume the defense of any Third Party Claim by giving written notice to the Indemnified Party within 30 days after the indemnifying Party's receipt of an Indemnification Claim Notice. The assumption of the defense of a Third Party Claim by the indemnifying Party will not be construed as an acknowledgment that the indemnifying Party is liable to indemnify any Indemnitee in respect of the Third Party Claim, nor will it constitute a waiver by the indemnifying Party of any defenses it may assert against any Indemnitee's claim for indemnification. Upon assuming the defense of a Third Party Claim, the indemnifying Party may appoint as lead counsel in the defense of the Third Party Claim any legal counsel selected by the indemnifying Party. In the event the indemnifying Party assumes the defense of a Third Party Claim, the Indemnified Party will immediately deliver to the indemnifying Party all original notices and documents (including court papers) received by any Indemnitee in connection with the Third Party Claim. Should the indemnifying Party assume the defense of a Third Party Claim, the indemnifying Party will not be liable to the Indemnified Party or any other Indemnitee for any legal expenses subsequently incurred by such Indemnified Party or other Indemnife in connection with the analysis, defense or settlement of the Third Party Claim. In the event that it is ultimately determined that the indemnifying Party is not obligated to indemnify, defend or hold harmless an Indemnitee from and against the Third Party Claim, the Indemnified Party Will reimburse the indemnifying Party for any and all costs and expenses (including attorneys' fees and costs of suit) and any Losses incurred by the indemnifying Party in its defense of the Third Party Claim with respect to such Indemnitee.

(b) Right to Participate in Defense. Without limiting Section 10.3.2(a), any Indemnitee will be entitled to participate in, but not control, the defense of such Third Party Claim and to employ counsel of its choice for such purpose; *provided, however*, that such employment will be at the Indemnitee's own expense unless (i) the employment thereof has been specifically authorized by the indemnifying Party in writing, or (ii) the indemnifying Party has failed to assume the defense and employ counsel in accordance with Section 10.3.2(a) (in which case the Indemnified Party will control the defense).

(c) Settlement. With respect to any Losses relating solely to the payment of money damages in connection with a Third Party Claim and that will not result in the Indemnitee's becoming subject to injunctive or other relief or otherwise adversely affect the business of the Indemnitee in any manner, and as to which the indemnifying Party will have acknowledged in writing the obligation to indemnify the Indemnitee hereunder, the indemnifying Party will have the sole right to consent to the entry of any judgment, enter into any settlement or

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otherwise dispose of such loss, on such terms as the indemnifying Party, in its sole discretion, will deem appropriate. With respect to all other losses in connection with Third Party Claims, where the indemnifying Party has assumed the defense of the Third Party Claim in accordance with Section 10.3.2(a), the indemnifying Party will have authority to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such loss provided it obtains the prior written consent of the Indemnified Party (which consent will not be unreasonably withheld or delayed). The indemnifying Party will not be liable for any settlement or other disposition of a loss by an Indemnitee that is reached without the written consent of the indemnifying Party. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, no Indemnitee will admit any liability with respect to, or settle, compromise or discharge, any Third Party Claim without the prior written consent of the indemnifying Party.

(d) Cooperation. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, the Indemnified Party will, and will cause each other Indemnitee to, cooperate in the defense or prosecution thereof and will furnish such records, information and testimony, provide such witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith. Such cooperation will include access during normal business hours afforded to the indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Third Party Claim, and making Indemnitees and other employees and agents available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder, and the indemnifying Party will reimburse the Indemnified Party for all its reasonable out-of-pocket expenses in connection therewith.

(e) Expenses. Except as provided above, the reasonable and verifiable costs and expenses, including fees and disbursements of counsel, incurred by the Indemnified Party in connection with any claim will be reimbursed on a calendar quarter basis by the indemnifying Party, without prejudice to the indemnifying Party's right to contest the Indemnified Party's right to indemnification and subject to refund in the event the indemnifying Party is ultimately held not to be obligated to indemnify the Indemnified Party.

Section 10.4 **Insurance.** Each Party will have and maintain such types and amounts of liability insurance as is normal and customary in the industry generally for parties similarly situated, and will upon request provide the other Party with a certificate of insurance. Each party will promptly notify the other Party of any material change in insurance coverage or lapse in coverage in that regard.

ARTICLE 11— REPRESENTATIONS AND WARRANTIES

Section 11.1 **Representations, Warranties and Covenants.** Each Party hereby represents, warrants and covenants to the other Party as of the Effective Date as follows:

11.1.1 Corporate Authority. Such Party (a) has the power and authority and the legal right to enter into this Agreement and perform its obligations hereunder, and (b) has taken all necessary action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid and binding obligation of such Party and is enforceable against it in accordance with its terms subject to the effects of bankruptcy, insolvency or other laws of general application affecting the enforcement of creditor rights and judicial principles affecting the availability of specific performance and general principles of equity, whether enforceability is considered a proceeding at law or equity.

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11.1.2 Litigation. Such Party is not aware of any pending or threatened litigation (and has not received any communication) that alleges that such Party's activities related to this Agreement have violated, or that by conducting the activities as contemplated herein such Party would violate, any of the intellectual property rights of any other party.

11.1.3 Consents, Approvals, etc. All necessary consents, approvals and authorizations of all Regulatory Authorities and other parties required to be obtained by such Party in connection with the execution and delivery of this Agreement and the performance of its obligations hereunder have been obtained.

11.1.4 Conflicts. The execution and delivery of this Agreement and the performance of such Party's obligations hereunder (a) do not conflict with or violate any requirement of Applicable Law or any provision of the articles of incorporation, bylaws or any similar instrument of such Party, as applicable, in any material way, and (b) do not conflict with, violate, or breach or constitute a default or require any consent under, any contractual obligation or court or administrative order by which such Party is bound.

11.1.5 Debarment. No such Party nor any of its Affiliates has been debarred or is subject to debarment and neither such Party nor any of its Affiliates will use in any capacity, in connection with the services to be performed under this Agreement, any party who has been debarred pursuant to Section 306 of the Federal Food, Drug, and Cosmetic Act, as amended, or who is the subject of a conviction described in such section. Each Party will inform the other Party in writing immediately if it or any party who is performing services hereunder is debarred or is the subject of a conviction described in Section 306, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to such Party's knowledge, is threatened, relating to the debarment or conviction of such Party or any party performing services hereunder.

Section 11.2 Additional Representations and Warranties of Isis. Isis represents and warrants to OncoGenex that Isis is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as it is contemplated to be conducted by this Agreement. Isis further represents and warrants to OncoGenex that any Product Isis provides to OncoGenex for pre-clinical and clinical use will be in compliance with FDA regulatory requirements for use in humans.

Section 11.3 Additional Representations and Warranties of OncoGenex. OncoGenex represents and warrants to Isis that OncoGenex is a corporation duly organized, validly existing and in good standing under the laws of Canada, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as it is contemplated to be conducted by this Agreement.

Section 11.4 DISCLAIMER OF WARRANTY. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN SECTIONS 11.1, 11.2 AND 11.3, ONCOGENEX AND ISIS MAKE NO REPRESENTATIONS AND GRANT NO WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND ONCOGENEX AND ISIS EACH SPECIFICALLY DISCLAIM ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE OR ANY WARRANTY AS TO THE VALIDITY OF ANY PATENTS OR THE NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

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ARTICLE 12— MISCELLANEOUS

Section 12.1 Force Majeure. Neither Party will be held liable or responsible to the other Party or be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from events beyond the reasonable control of the non-performing Party, including fires, floods, embargoes, shortages, epidemics, quarantines, war, acts of war (whether war be declared or not), insurrections, riots, civil commotion, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority. The non-performing Party will notify the other Party of such force majeure within ten (10) days after such occurrence by giving written notice to the other Party stating the nature of the event, its anticipated duration, and any action being taken to avoid or minimize its effect. The suspension of performance will be of no greater scope and no longer duration than is necessary and the non-performing Party will use Commercially Reasonable Efforts to remedy its inability to perform; *provided, however*, that in the event the suspension of performance continues for one-hundred and eighty (180) days after the date of the occurrence, the Parties will meet to discuss in good faith how to proceed in order to accomplish the goals of the Collaboration outlined in this Agreement.

Section 12.2 Subcontractors. Each Party will have the right, subject to the prior written consent of the Operating Committee, such consent not to be unreasonably withheld or delayed, to subcontract any of its research, development, manufacture and/or commercialization activities to a Third Party, provided that it furnishes the other Party with advanced written notice thereof, which notice will specify the work to be subcontracted, and obtains a written undertaking from the subcontractor that it will be subject to the applicable terms and conditions of this Agreement, including the provisions of Article 6. If a Party wishes to subcontract any of its research, development, manufacturing or commercialization activities to a Third Party and the Operating Committee consents, the other Party may submit a bid to the subcontracting Party to perform such work. The subcontracting Party will use Commercially Reasonable Efforts to enter into an agreement with the bidder that is best able to meet the Collaboration's requirements, taking into consideration such factors as price, timing, quality, capacity, quantity, reliability and reputation, provided that such bidder is reasonably acceptable to the Operating Committee. Unless the Parties agree otherwise, the subcontracting Party will remain solely liable for the performance of its research, development, manufacture or commercialization activities by its subcontractor; and further, the subcontracting Party will remain solely responsible for all costs and expenses associated with its use of subcontractor(s).

Section 12.3 Assignment. Without the prior written consent of the other Party hereto, neither Party will sell, transfer, assign, delegate, pledge or otherwise dispose of, whether voluntarily, involuntarily, by operation of law or otherwise, this Agreement or any of its rights or duties hereunder; provided, however, that either Party hereto may assign or transfer this Agreement or any of its rights or obligations hereunder without the consent of the other Party to any Third Party with which it has merged or consolidated, or to which it has transfered all or substantially all of its assets to which this Agreement relates if in any such event the Third Party assignee or surviving entity assumes in writing all of the assigning Party's obligations under this Agreement. Any purported assignment or transfer in violation of this Section will be void *ab initio* and of no force or effect.

Section 12.4 Severability. If any provision of this Agreement is held to be illegal, invalid or unenforceable by a court of competent jurisdiction, such adjudication shall not affect or impair, in whole or in part, the validity, enforceability, or legality of any remaining portions of this Agreement. All remaining portions shall remain in full force and effect as if the original Agreement had been executed without the invalidated, unenforceable or illegal part.

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Section 12.5 Governing Law. This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia without reference to any rules of conflicts of laws.

Section 12.6 Dispute Resolution.

12.6.1 General. The Parties will negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim arising from or related to this Agreement or the breach thereof in accordance with Section 3.2 hereof. If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim will be finally resolved by binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"), and judgment on the arbitration award may be entered in any court having jurisdiction thereof. The arbitration will be conducted by a panel of three persons experienced in the pharmaceutical business: within 30 days after initiation, each party will select one person to act as arbitrator and the two party-selected arbitrators will select a third arbitrator within 30 days of their appointment. If the arbitrators selected by the parties are unable or fail to agree upon the third arbitrator, the third arbitrator will be appointed by the AAA. No individual shall be appointed to arbitrate a dispute pursuant to this Agreement unless he or she agrees in writing to be bound by the provisions of this Section 12.6. The place of arbitration will be Seattle, Washington. Either Party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved.

12.6.2 Disputes Regarding Unilateral Development or Sublicensing Terms. If the Parties cannot agree on the terms under which one Party unilaterally, or a Third Party sublicensee, can develop and commercialize the Product in accordance with Section 2.4.3, the arbitrators will set a fair value for any disputed terms, taking into consideration valuation factors including but not limited to: the Proportionate Share of the Parties; stage of development of the Product including the clinical trials which have been completed and which would need to be completed before approval by the Regulatory Authority; the requirement for additional Third Party licenses for the commercialization of the Product; market potential for the Product including the size of the target market(s), the availability, effectiveness and cost of alternative treatments, and the life of the Patents relating to the Product; likelihood of the Product receiving Regulatory Approval; and, the time and resources required to receive Regulatory Approval and begin marketing of the Product.

12.6.3 Disputes Regarding Material Breach. If the Parties are in dispute as to whether one party is in material breach of this Agreement, then the arbitrators will first determine if material breach has in fact occurred, and if so, will as part of the same arbitration, determine a royalty to be paid by the non-defaulting Party to the defaulting Party if the non-defaulting Party elects to unilaterally develop and commercialize the Product, taking into consideration the factors set forth in Section 12.6.2, and will award damages to the non-defaulting Party, in the form of off-set royalties or otherwise, to account for the damages to the non-defaulting Party's contribution to the Product in view of the breach.

12.6.4 Costs and Expenses. Except as expressly provided herein, each Party will bear its own costs and expenses and attorneys' fees and an equal share of the arbitrators' and any administrative fees of arbitration. Notwithstanding the foregoing, if a Party has been found to be in material breach of this Agreement, the defaulting Party will be responsible for both Parties' costs and expenses (including the costs of the arbitrators and any administrative fees of arbitration) and the reasonable attorneys' fees of the non-defaulting Party.

12.6.5 Procedure. Except to the extent necessary to confirm an award or as may be required by law, neither a Party nor an arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties. In no event will an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the

dispute, controversy or claim would be barred by the applicable Province of British Columbia statute of limitations.

12.6.6 Speedy Resolution. The Parties intend, and shall take all reasonable action as is necessary or desirable to ensure, that there be a speedy resolution to any dispute which becomes the subject of arbitration, and the arbitrators shall conduct the arbitration so as to resolve the dispute as expeditiously as possible.

12.6.7 Awards. All awards shall be in writing and shall state reasons. Executed copies of all awards shall be delivered by the arbitrators to the Parties as soon as is reasonably possible. All awards of the arbitrators shall be final and binding on the Parties, and there shall be no appeal of any such award whatsoever. The Parties undertake to satisfy any award without delay.

Section 12.7 Notices. All notices or other communications that are required or permitted hereunder will be in writing and delivered personally with acknowledgement of receipt, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier as provided herein), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to OncoGenex, to:

OncoGenex Technologies Inc. Suite 400, 609 - 14th Street N.W. Calgary, Alberta T2N 2A1 Attention: Scott D. Cormack, President Facsimile: 403-283-6753

with a copy to: [***]

If to Isis, to:

Isis Pharmaceuticals, Inc. 2292 Faraday Avenue Carlsbad, California 92008 Attention: Executive Vice President Facsimile: (760) 603-4650

with a copy to:

Attention: General Counsel Facsimile: (760) 603-2707

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such communication will be deemed to have been given (i) when delivered, if personally delivered or sent by facsimile on a Business Day, (ii) on the Business Day after dispatch, if sent by nationally-recognized overnight courier, and (iii) on the third business day following the date of mailing, if sent by mail. It is understood and agreed that this Section 12.7 is not intended to govern the day-to-day business communications necessary between the Parties in performing their duties, in due course, under the terms of this Agreement.

Section 12.8 Entire Agreement; Modifications. This Agreement sets forth and constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof and all prior agreements, understanding, promises and representations, whether written or oral, with respect thereto are superseded hereby. Each Party confirms that it is not relying on any representations or warranties of the other Party except as specifically set forth herein. No amendment, modification,

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release or discharge will be binding upon the Parties unless in writing and duly executed by authorized representatives of both Parties.

Section 12.9 **Relationship of the Parties.** It is expressly agreed that the Parties will be independent contractors of one another and that the relationship between the Parties will not constitute a partnership, joint venture or agency. Neither Party nor the Operating Committee will have the authority to make any statements, representations or commitments of any kind, or to take any action, which will be binding on the other, without the prior written consent of the other to do so. All persons employed by a Party will be employees of such Party and not of the other Party and all costs and obligations incurred by reason of any such employment will be for the account and expense of such Party.

Section 12.10 Waiver. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver will be effective unless set forth in a written instrument duly executed by or on behalf of the Party waiving such term or condition. The waiver by either Party hereto of any right hereunder or of the failure to perform or of a breach by the other Party will not be deemed a waiver of any other right hereunder or of any other breach or failure by said other Party whether of a similar nature or otherwise.

Section 12.11 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

Section 12.12 No Benefit to Third Parties. The representations, warranties, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties hereto and their successors and permitted assigns, and they will not be construed as conferring any rights on any other parties.

Section 12.13 Further Assurance. Each Party will duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including the filing of such assignments, agreements, documents and instruments, as may be necessary or as the other Party may reasonably request in connection with this Agreement or to carry out more effectively the provisions and purposes, or to better assure and confirm unto such other Party its rights and remedies under this Agreement.

Section 12.14 **References.** Unless otherwise specified, (a) references in this Agreement to any Article, Section, Schedule or Exhibit will mean references to such Article, Section, Schedule or Exhibit of this Agreement, (b) references in any section to any clause are references to such clause of such section, and (c) references to any agreement, instrument or other document in this Agreement refer to such agreement, instrument or other document as originally executed or, if subsequently varied, replaced or supplemented from time to time, as so varied, replaced or supplemented and in effect at the relevant time of reference thereto.

Section 12.15 Construction. Except where the context otherwise requires, wherever used, the singular will include the plural, the plural the singular, the use of any gender will be applicable to all genders and the word "or" is used in the inclusive sense (and/or). The captions of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The term "including" as used herein will mean including, without limiting the generality of any description preceding such term. The language of this Agreement will be deemed to be the language mutually chosen by the Parties and no rule of strict construction will be applied against either Party hereto. Appendices to this Agreement, or added hereto according to the terms of this Agreement, are made part of this Agreement.

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IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

ONCOGENEX TECHNOLOGIES INC.

Per: /s/ Scott D. Cormack

Scott D. Cormack, President & CEO

ISIS PHARMACEUTICALS, INC.

Per: /s/ B. Lynne Parshall

B. Lynne Parshall *Executive Vice President and CFO*

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APPENDIX A

Definitions

"Affiliate" of a party means any other party that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with such first party. For purposes of this definition only, "control" and, with correlative meanings, the terms "controlled by" and "under common control with" will mean (a) the possession, directly or indirectly, of the power to direct the management or policies of a party, whether through the ownership of voting securities or by contract relating to voting rights or corporate governance, and (b) the ownership, directly or indirectly, of more than fifty percent (50%) of the voting securities or other ownership interest of a party; provided that, if local law restricts foreign ownership, control will be established by direct or indirect ownership of the maximum ownership percentage that may, under such local law, be owned by foreign interests.

"Applicable Law" means the applicable laws, rules, and regulations, including any rules, regulations, guidelines, or other requirements of the Regulatory Authorities, that may be in effect from time to time.

"Business Day" means any day, other than Saturday, Sunday or any statutory holiday in the Province of British Columbia or the United States.

"Calendar Year" means each successive period of 12 months commencing on January 1 and ending on December 31.

"Clusterin" means the gene target which is also referred to as Testosterone Repressed Prostatic Message -2 (TRPM-2), and Sulphated Glycoprotein-2 (SGP-2).

"Collaboration Activities" means the responsibilities of the Parties under this Agreement to research, develop, manufacture, and commercialize the Product.

"**Commercially Reasonable Efforts**" means, with respect to the research, development, manufacture or commercialization of the Product, efforts and resources commonly used in the biotechnology industry for products of similar commercial potential at a similar stage in its lifecycle, taking into consideration their safety and efficacy, cost to develop, priority in relation to other products under development by the other Party, the competitiveness of alternative products, proprietary position, the likelihood of regulatory approval, profitability, and all other relevant factors.

"**Confidential Information**" means all information and know-how and any tangible embodiments thereof provided by or on behalf of one Party to the other Party either in connection with the discussions and negotiations pertaining to this Agreement or in the course of performing this Agreement, including data; knowledge; practices; processes; ideas; research plans; engineering designs and drawings; research data; manufacturing processes and techniques; scientific, manufacturing, marketing and business plans; and financial and personnel matters relating to the disclosing Party or to its present or future products, sales, suppliers, customers, employees, investors or business. For purposes of this Agreement, notwithstanding the Party that disclosed such information or know-how, all information or know-how of OncoGenex shall be Confidential Information of OncoGenex, and all information and know-how of Isis shall be Confidential Information of Isis.

Notwithstanding the foregoing, information or know-how of a Party shall not be deemed Confidential Information for purposes of this Agreement if such information or know-how:

(a) was already known to the receiving Party, other than under an obligation of confidentiality or non-use, at the time of disclosure to such receiving Party;

(b) was generally available or known to parties reasonably skilled in the field to which such information or know-how pertains, or was otherwise part of the public domain, at the time of its disclosure to, or, with respect to know-how, discovery or development by, such receiving Party;

(c) became generally available or known to parties reasonably skilled in the field to which such information or know-how pertains, or otherwise became part of the public domain, after its disclosure to such receiving Party through no fault of the recieving Party;

(d) was disclosed to such receiving Party, other than under an obligation of confidentiality or non-use, by a Third Party who had no obligation to the Party that Controls such information and know-how not to disclose such information or know-how to others; or

(e) was independently discovered or developed prior to disclosure by such receiving Party, as evidenced by their written records, without the use of Confidential Information belonging to the Party that Controls such information and know-how.

Specific aspects or details of Confidential Information shall not be deemed to be within the public domain or in the possession of a Party merely because the Confidential Information is embraced by more general information in the public domain or in the possession of such Party. Further, any combination of Confidential Information shall not be considered to be in the public domain or in the possession of a Party merely because individual elements of such Confidential Information are in the public domain or in the possession of such Party unless the combination and its principles are in the public domain or in the possession of such Party.

"**Control**" means, with respect to any Patent or other intellectual property right, possession of the right (whether by ownership, license or otherwise), to assign, or grant a license, sublicense or other right to or under, such Patent or right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.

"FDA" means the United States Food and Drug Administration and any successor agency thereto.

"FTE" means the equivalent of the work of one employee full time for one year (consisting of at least a total of [***] hours per year (excluding vacations and holidays) of work on or directly related to the Collaboration), carried out by an Isis employee or Third Party mutually agreed upon by the Parties. For the purposes of Appendix 2.3.1, the FTE rate will be (i) [***] (U.S.) per FTE for any of the following activities: drug substance manufacturing; analytical chemistry; process chemistry; formulation; raw material ordering and handling; quality control; or manufacturing technology transfer; and (ii) [***] (U.S.) per FTE for any of the following activities: toxicology; pharmacokinetics/metabolism; regulatory; clinical development; or data management. These FTE rates will be adjusted upward on a Calendar Year basis commencing January 1, 2002 (and on January 1 of each year thereafter during the Term of this Agreement) by a factor which reflects changes in the Consumer Price Index for San Diego, California as reported on that date in each applicable year during the Term of the Agreement when compared to the comparable statistic for that date in the preceding year.

"GAAP" means generally accepted accounting principles of the United States consistently applied.

"Improvement" means any enhancement or improvement (whether or not patentable) to the Isis Core Technology Patents, Isis Manufacturing Patents, or the OncoGenex Product Patents, that is made by either party during the Term of this Agreement.

"IND" means an investigational new drug application filed with the FDA or TPD for authorization to commence human clinical trials, and its equivalent in other countries or regulatory jurisdictions.

"Initial Project Plan" means the first Project Plan of the Collaboration, as set forth in Section 2.3.

"Isis Core Technology Patents" means Patents Controlled by Isis on the Effective Date that are necessary for the development and commercialization of the Product, but not including the Isis Manufacturing Patents.

"Isis Manufacturing Patents" means Patents Controlled by Isis on the Effective Date that claim the practice of the Isis Standard Chemistry Manufacturing Process.

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"Isis Patent Rights" means any Patents owned or Controlled by Isis.

"Isis Standard Chemistry" means "2'MOE Gapmers" or an antisense phosphorothioate oligonucleotide of 15-30 nucleotides wherein all of the backbone linkages are modified by adding a sulfur at the non-bridging oxygen (phosphorothioate) and a stretch of at least 10 consecutive nucleotides remain unmodified (deoxy sugars) and the remaining nucleotides contain an O'-methyl O'-ethyl substitution at the 2' position (MOE).

"Isis Standard Chemistry Manufacturing Process" means the manufacturing process used by Isis as of the Effective Date to manufacture products comprising Isis Standard Chemistry, represented by the batch record for [***]. Manufacturing for this purpose includes synthesis, purification and analysis.

"Joint Patents" means all Patents that claim or disclose Joint Technology.

"Joint Technology" means any and all (a) inventions conceived, discovered, developed or otherwise made (as determined in accordance with the rules of inventorship under United States patent laws to establish authorship, inventorship or ownership), jointly by employees or agents of Isis and employees or agents of OncoGenex or, to the extent permitted, by one Party and a sublicensee of the other Party or both Parties (as the case may be), in connection with the work conducted under this Agreement, whether or not patented or patentable.

"Licensing Revenue" means all revenues, receipts, monies, and the fair market value of all other consideration directly or indirectly collected or received whether by way of cash, or credit or any barter, benefit, advantage, or concession received by a Party pursuant to each sublicense agreement relating to the Product including, without limitation, license fees, royalties, milestone payments and the fair market value of equities received, as determined on the date of receipt thereof.

"**Net Sales**" means the gross invoice price of the Product sold by either Party and sublicensees to a Third Party which is not a sublicensee of the selling party (unless such sublicensee is the end user of the Product, in which case the amount billed therefor shall be deemed to be the amount that would be billed to a Third Party in an arm's-length transaction) for sales of such Product to such end users less the following items, as allocable to such Product (if not previously deducted from the amount invoiced): (i) trade discounts, credits or allowances, (ii) credits or allowances additionally granted upon returns, rejections or recalls (except where any such recall arises out of the Party or its sublicensee's gross negligence, willful misconduct or fraud), (iii) freight, shipping and insurance charges, (iv) taxes, duties or other governmental tariffs (other than income taxes) and (v) government mandated rebates.

"Net Licensing Revenue" means the amount equal to any Licensing Revenue less Third Party Payments.

"OncoGenex Patent Rights" means any Patents owned or Controlled by OncoGenex.

"OncoGenex Product Patents" means Patents Controlled by OncoGenex on the Effective Date that claim an antisense inhibitor of Clusterin or a method of using an antisense inhibitor of Clusterin.

"**OGX-011**" means an antisense inhibitor of Clusterin having the sequence [***] with phosphorothioate linkages throughout and in which bases [***] and [***] contain 2'-O-methoxyethyl sugar modifications, also referred to as ISIS 112989.

"**Patents**" shall include (x) all U.S. patents and patent applications, (y) any substitutions, divisions, continuations, continuations-in-part, reissues, renewals, registrations, confirmations, re-examinations, extensions, supplementary protection certificates and the like, and any provisional applications, of any such patents or patent applications, and (z) any foreign or international equivalent of any of the foregoing.

"**Product**" means an intravenous or subcutaneous pharmaceutical preparation, excluding encapsulation technology controlled by Isis, containing as the sole active pharmaceutical ingredient

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OGX-011. For clarity, the product may be used in association with other products such as chemotherapy, hormone ablation therapy and radiation therapy and the immediately preceding sentence does not limit such intended use.

"**Product-Specific Technology**" means any discovery, device, process, formulation, or Improvement, whether or not patented or patentable, which is made solely by Isis or OncoGenex, or jointly by Isis and OncoGenex, during the Term of this Agreement, and the application of which has utility only with respect to the Product.

"Product-Specific Technology Patents" means all Patents that disclose or claim Product-Specific Technology.

"**Project Plan**" means any development plan for Collaboration Activities subsequent to the Initial Project Plan, including the costs associated with such development plan and the proposed distribution of such costs between the Parties.

"**Proportionate Share**" means the relative ownership of the Product and relative sharing of expenses and revenue with respect to the Product between the Parties in relation to each other.

"**Regulatory Approval**" means any and all approvals (including pricing and reimbursement approvals), licenses, registrations or authorizations of any Regulatory Authority, necessary for the development and commercialization of the Product in a country, including any (a) approval for the Product (including any INDs, and supplements and amendments thereto); (b) pre- and post-approval marketing authorizations (including any prerequisite manufacturing approval or authorization related thereto); (c) labeling approval; and (d) technical, medical and scientific licenses.

"Regulatory Authority" means any applicable government entities regulating or otherwise exercising authority with respect to the development and commercialization of the Product.

"**Regulatory Documentation**" means all applications, registrations, licenses, authorizations and approvals (including all Regulatory Approvals), all correspondence submitted to or received from Regulatory Authorities (including minutes and official contact reports relating to any communications with any Regulatory Authority), all supporting documents and all clinical studies and tests, including the manufacturing batch records, relating to the Product, and all data contained in any of the foregoing, including all regulatory drug lists, advertising and promotion documents, adverse event files and complaint files.

"Revenue" means all revenues, receipts, monies, and the fair market value of all other consideration directly or indirectly collected or received whether by way of cash or credit or any barter, benefit, advantage, or concession received by any Party relating to the sale or any other exploitation of the Product.

"Technology" means Isis Patent Rights, the OncoGenex Patent Rights, the Product-Specific Technology Patents, Joint Patents and/or the Joint Technology, as applicable.

"Third Party" means any party other than Isis or OncoGenex.

"Third Party Payments" means royalties, milestones, and other payments owing to Third Parties, including payments as set forth in Section 5.2.1.

"TPD" means the Therapeutics Products Directorate, Health Products and Food Branch, Health Canada, and any successor agency thereto.

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APPENDIX 2.3.1 INITIAL PROJECT PLAN

[***]

CONFIDENTIAL TREATMENT REQUESTED

QuickLinks

Exhibit 10.1

COLLABORATION AND CO-DEVELOPMENT AGREEMENT ARTICLE 1—DEFINITIONS ARTICLE 2— SCOPE OF COLLABORATION; COLLABORATION ACTIVITIES ARTICLE 3— OPERATION OF THE COLLABORATION ARTICLE 4— GRANT OF RIGHTS ARTICLE 5— FINANCIAL PROVISIONS ARTICLE 6— CONFIDENTIALITY ARTICLE 6— CONFIDENTIALITY ARTICLE 8— TERM AND TERMINATION ARTICLE 8— TERM AND TERMINATION ARTICLE 9— MATERIAL BREACH OF THIS AGREEMENT ARTICLE 10— INDEMNIFICATION AND INSURANCE ARTICLE 11— REPRESENTATIONS AND WARRANTIES ARTICLE 12— MISCELLANEOUS APPENDIX A Definitions APPENDIX 2.3.1 INITIAL PROJECT PLAN

ONCOGENEX TECHNOLOGIES AND ISIS PHARMACEUTICALS TO DEVELOP ANTISENSE DRUG FOR PROSTATE CANCER

Vancouver, British Columbia, Canada, and Carlsbad, CA, USA November 26, 2001- OncoGenex Technologies Inc., a Canadian oncology-focused research and development company, and Isis Pharmaceuticals, Inc. (NASDAQ: ISIP) announced today they have established a drug development collaboration to co-develop and commercialize OGX-011, an anti-cancer antisense drug candidate. OGX-011 combines OncoGenex's proprietary antisense position in inhibitors to the target, clusterin, with Isis' proprietary second-generation antisense chemistry. OGX-011 is designed to inhibit the secretory protein clusterin, which acts as a cell-survival protein that is over-expressed in response to tumor killing strategies, such as chemotherapy, hormone ablation and radiation therapy. Based on analysis of human tumor tissue, clusterin is over-expressed in several cancers, including prostate, renal, bladder, lung, ovarian and urothelial. Inhibiting clusterin is intended to enhance the effects of drug therapies in the treatment of the disease.

In preclinical animal studies, scientists from both OncoGenex and Isis demonstrated OGX-011 improved the potency of traditional chemotherapies more than 10-fold in prostate cancer without compromising safety. OGX-011 has also been shown to reduce levels of clusterin, as well as significantly delay disease progression in prostate and renal tumor models in animals. These findings support the continued development of OGX-011 in combination with chemotherapeutic and other agents.

"We believe the combined experience of OncoGenex in cancer biology and clinical trials together with Isis' development experience and advances in secondgeneration antisense chemistry will contribute tremendously to the potential of this promising new cancer compound," said Scott D. Cormack, OncoGenex's President and CEO.

"New treatments with reduced side effects and increased potency are needed, especially for men with advanced prostate cancer who have developed a resistance to hormone therapies. At that stage of disease, there are no alternative treatments," said Martin E. Gleave, M.D., FRCSC, FACS, Director of Clinical Research at the Prostate Centre at Vancouver Hospital & Health Sciences Centre and OncoGenex's Chief Scientific Officer.

Initially, Isis will conduct preclinical toxicology and pharmacokinetic studies of OGX-011. Isis will also manufacture OGX-011 for preclinical and Phase I/II studies. OncoGenex will perform Phase I/II clinical trials to assess the safety and efficacy of OGX-011 as a single agent and in combination with docetaxel (TAXOTERE®) in men with localized and hormone refractory prostate cancer. As part of its ongoing commitment to elevating the standard of care in prostate cancer, Aventis Pharma Inc. will provide financial support as well as supply the neo-adjuvant hormone therapy for the study protocol. Specific financial terms of the deal between Isis and OncoGenex were not disclosed.

OGX-011 will be the first antisense drug based on Isis' proprietary second-generation chemistry, called 2'-O-methoxyethyl, to enter the clinic for the treatment of cancer. Second-generation antisense drugs offer greater potency, enhanced tolerability via subcutaneous injection, and improved dosing convenience compared to first-generation antisense drugs.

"The agreement will allow Isis to further develop and capitalize on the benefits of our proprietary second-generation chemistry through an established relationship with OncoGenex that builds on previous work, which produced intriguing antisense data on clusterin," said Stanley T. Crooke, M.D., Ph.D., Isis' Chairman and Chief Executive Officer. "This strategic partnership is in alignment with our overall business plan to expand the reach and potential of antisense therapeutics, specifically in cancer.

According to the Prostate Cancer Research Institute, 180,000 men are diagnosed with prostate cancer every year in the United States. It is the second leading cause of cancer death in both American and Canadian men. The National Cancer Institute of Canada estimates that 17,800 Canadian men will

be diagnosed with prostate cancer in 2001, making prostate cancer the leading cancer diagnosed in Canadian men.

OncoGenex Technologies Inc. is focused on advancing and commercializing therapeutics for cancer. The company is the exclusive licensee of technologies from the University of British Columbia and the Vancouver Hospital & Health Sciences Centre, and has working relationships with the Division of Urology as well as the Prostate Centre at Vancouver Hospital & Health Sciences Centre. OncoGenex currently has two products in pre-clinical development, with its lead, OGX-011 intended to enter the clinic in the next twelve months. Additional technologies are being evaluated for future development. Additional information about OncoGenex is available at www.oncogenex.ca.

Isis Pharmaceuticals, Inc. is exploiting its expertise in RNA to discover and develop novel human therapeutic drugs. The company has commercialized its first product, Vitravene® (fomivirsen), to treat CMV-induced retinitis in AIDS patients. In addition, Isis has 12 products in its development pipeline with two in late-stage development and five in Phase II human clinical trials. ISIS 3521, an inhibitor of PKC-alpha, is in Phase III trials for non-small cell lung cancer. Isis is preparing to initiate a Phase III program for ISIS 2302 (alicaforsen), an ICAM-1 inhibitor, in Crohn's disease. Isis has a broad patent estate as the owner or exclusive licensee of nearly 900 issued patents worldwide. Isis' GeneTrove™ division uses antisense to assist pharmaceutical industry partners in validating and prioritizing potential gene targets through customized services and access to an extensive gene function database. Ibis Therapeutics™ is a division focused on the discovery of small molecule drugs that bind to RNA. Additional information about Isis is available at www.isip.com.

This press release contains forward-looking statements concerning the clinical development of Isis' cancer program, OGX-011 and its prospects as a treatment for prostate cancer, OncoGenex's drug development program, and the potential of Isis' drug discovery program. There are no guarantees that future clinical trials will confirm the preliminary results referred to in this release or that OGX-011 will receive regulatory approvals or prove to be commercially successful. Actual results could differ materially from those projected in this release. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Isis' research and development programs are described in additional detail on Form 10Q, for the period ended September 30, 2001, which is on file with the U.S. Securities and Exchange Commission, copies of which are available from the company.

QuickLinks

<u>Exhibit 99.1</u>

ONCOGENEX TECHNOLOGIES AND ISIS PHARMACEUTICALS TO DEVELOP ANTISENSE DRUG FOR PROSTATE CANCER