

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

F O R M 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) June 12, 1998

Cytoclonal Pharmaceuticals Inc.

(Exact name of Registrant as Specified in Charter)

Delaware	0-26918	75-2402409
-----	-----	-----
(State or Other Jurisdiction of Incorporation)	(Commission) File Number)	(IRS Employer Identification No.)

9000 Harry Hines Boulevard, Suite 330, Dallas, Texas 75235

(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code (214) 353-2922

N/A

(Former name or former address, if changed since last report)

ITEM 5. OTHER EVENTS.

On June 12, 1998, Cytoclonal Pharmaceuticals Inc. (the "Company") entered into a Master License Agreement (the "BMS License Agreement") and a Sponsored Research Agreement (the "R&D Agreement") with Bristol-Meyers Squibb Company ("BMS"). Pursuant to the BMS License Agreement, the Company granted to BMS an exclusive sublicense under (i) the Company's License Agreement with The Research & Development Institute, Inc. at Montana State University ("RDI") (the "RDI Agreement"), and (ii) the Company's License Agreement with the Washington State University Research Foundation ("WSURF") (the "WSURF Agreement"). Pursuant to the RDI Agreement, the Company acquired a license to certain patents and technology relating to the use of microorganisms for the production of paclitaxel and other taxanes and components. Pursuant to the WSURF Agreement, the Company acquired a license to certain patents and technology relating to the several genes coded for the enzymes involved in the biosynthesis of paclitaxels and other taxanes. The term of the BMS License Agreement shall run, subject to earlier termination in certain circumstances, as to each CPI-Covered Product (as defined) in each country of the Territory (as defined) until the later of (i) ten (10) years from the First Commercial Sale (as defined) of such CPI-Covered Product in such country, or (ii) such time as neither the making, use nor sale at the time by BMS, its affiliates or sublicensees in such country of such CPI-Covered Product would not infringe (a) any U.S. or foreign patents or patent applications, including reissues, renewals, extensions, continuations or continuations-in-part, copyrights or trademarks owned and licensed by RDI to the Company under the RDI Agreement, (b) certain U.S. and foreign patents or patent applications owned by WSURF and licensed by WSURF to the Company under the WSURF Agreement and (c) other licensed property, including Licensed Cell Lines, the Licensed Gene Materials, the Novel Taxanes from Fermentation, the Novel Taxanes from Covered Cell Line, the Licensed CPI-Technology and the

Improvements (as those terms are defined), together with all patent rights pertaining thereto, to the extent that such patent rights are not already part of the RDI Agreement and WSURF Agreement. BMS shall have the right to terminate the BMS License Agreement after December 12, 1998, effective upon ninety (90) days notice, in which event the BMS sublicense under the RDI Agreement and WSURF Agreement would terminate.

In addition, pursuant to the BMS License Agreement, BMS was granted a right of first negotiation during the term of the BMS License Agreement to obtain from the Company an exclusive, world-wide right to license or sublease to all or a part of any CPI Technology (as defined). The BMS License Agreement contemplates sales based royalty payments and payments by BMS to the Company against the advent of certain milestones and royalties.

The R&D Agreement, renewable by BMS for successive one-year periods thereafter, provided that the BMS License Agreement remains in effect at the time, contemplates a program directed toward developing microbial fermentation and genetic engineering technologies for the production of paclitaxel and other taxanes.

SIGNATURES

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

CYTOCLONAL PHARMACEUTICS INC.

Date: September 9, 1998

By: /s/ Daniel Shusterman

Daniel Shusterman, J.D.
Vice President Operations
Treasurer and Chief Financial Officer

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION	PAGE NUMBER
- - - - -	- - - - -	- - - - -
10.1*	Master License Agreement, dated as of June 12, 1998, between the Company and Bristol-Myers Squibb Company	
10.2*	Sublicense Agreement, dated May 27, 1998, between the Company and Bristol-Myers Squibb Company under The Research & Development Institute, Inc. License Agreement, as amended, dated June 10, 1993	
10.3*	Sublicense Agreement, dated May 19, 1998, between the Company and Bristol-Myers Squibb Company under the Washington State University Research Foundation	

License Agreement, dated July 8, 1996

- 10.4* Amended and Restated License Agreement, dated June 3, 1998, between the Washington State University Research Foundation and the Company
- 10.5* Amendment, dated May 27, 1998, to that certain License Agreement, dated June 10, 1993, between The Research and Development Institute, Inc. and the Company

- -----
* Confidential Portions omitted and filed separately with the U.S. Securities Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

MASTER LICENSE AGREEMENT

THIS MASTER LICENSE AGREEMENT (this "AGREEMENT") is dated as of June 12, 1998 between Cytoclonal Pharmaceuticals Inc., a Delaware corporation, having offices at 9000 Henry Hines Boulevard, Dallas, Texas 75235 ("CPI"), and Bristol-Myers Squibb Company, a Delaware corporation, having offices at Route 206 and Province Line Road, Princeton, New Jersey 08540 ("BMS").

PRELIMINARY STATEMENTS

A. CPI has acquired a license to certain patents and technology relating to the use of microorganisms for the production of paclitaxel, other taxanes and other compounds pursuant to a license agreement dated as of June 10, 1993 between Research & Development Institute, Inc. ("RDI") and CPI, as amended by amendments dated as of August 13, 1993, February 22, 1995 and May 27, 1998, respectively, and supplemented by letter dated March 31, 1998 from CPI to RDI (as so amended and supplemented, the "RDI/CPI LICENSE AGREEMENT").

B. CPI has also acquired a license to certain patents and technology relating to the several genes coded for the enzymes involved in the biosynthesis of paclitaxel and other taxanes pursuant to a license agreement effective as of July 8, 1996 between The Washington State University Research Foundation ("WSURF") and CPI, as amended and restated in its entirety as of June 3, 1998 (as so amended and restated, "WSURF/CPI LICENSE AGREEMENT").

C. BMS desires to obtain, and CPI desires to grant to BMS, a license under each of the RDI/CPI License Agreement and the WSURF/CPI License Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the Parties contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS.

As used in this Agreement, the following terms shall have those meanings set forth in this Section 1 unless the context dictates otherwise.

1.1 "AFFILIATE", with respect to any Party, shall mean any Person which, directly or indirectly, controls, is controlled by, or is under common control with, such Party. For these purposes, "control" shall refer to: (i) the possession, directly or indirectly, of the power to direct the management or policies of a Person or to veto any material decision relating to the management or policies of a Person, in each case, whether through the ownership of equity participation, voting securities or beneficial interests, by contract, by agreement, or otherwise.

1.2 "APPLICABLE ROYALTY RATE" shall mean the percentage rate or rates at which BMS shall pay royalties to CPI hereunder, determined on a calendar year-by-calendar year basis, as follows:

(a) Subject to Clause (c) below, with respect to using the RDI-Intellectual Property Rights to produce (i) paclitaxel to be commercialized as TAXOL-Registered Trademark- or another compound (which is not a Novel Taxane/BMS Compound) to be used by BMS, its Affiliates or its Sublicensees in commercialization as such without further chemical transformation into another compound, or (ii) baccatin III or a miscellaneous taxane mixture as a starting material for paclitaxel or any other compound (which is not a Novel Taxane/BMS Compound) ; or where the WSURF-Covered Product in question is (A) paclitaxel to be commercialized as TAXOL-Registered Trademark- or another compound (which is not a Novel Taxane/BMS Compound), in each case as a Direct WSURF-Covered Product, or (B) paclitaxel or any other compound (which is not a Novel Taxane/BMS Compound), as an Indirect WSURF-Covered Product, made from baccatin III or a mixture of miscellaneous taxanes produced by the WSURF Covered Cell Line in question:

Portion of Annual Net Sales	"Pac/direct"	"Bac" or "TT"
-----	-----	-----

[]

[]

[]

[]	[]	[]
[]	[]	[]
[]	[]	[]

As used in the foregoing table, the terms ""Pac/direct", "Bac" and "TT" are as defined in Section 5.2(b) below.

(b) Subject to Clause (c) below, with respect to (i) using the RDI-Intellectual Property Rights to produce any compound that is a Novel Taxane/BMS Compound or is produced using a Novel Taxane/BMS Compound As a starting material or (ii) any RDI-Licensed Product that is a Novel Taxane/BMS Compound or, as commercialized by BMS, its Affiliates or its Sublicensees, is produced using a Novel Taxane/BMS Compound as a starting material and in either case is produced otherwise than using the RDI-Intellectual Property Rights; or where the WSURF-Covered Product in question is a Novel Taxane/BMS Compound or is produced using a Novel Taxane/BMS Compound as a starting material:

Portion of Annual Net Sales -----	"Direct" -----	"Indirect" -----
[]	[]	[]

[]	[]	[]
[]	[]	[]
[]	[]	[]

As used in the foregoing table:

"DIRECT" refers to where the RDI-Intellectual Property Rights are used to produce the Novel Taxane/BMS Compound in question which is used by BMS, its Affiliates or its Sublicensees in commercialization as such without further chemical transformation into a different compound or where the WSURF-Covered Product in question is a Direct WSURF-Covered Product.

"INDIRECT" refers to where (i) the RDI-Intellectual Property Rights are used to produce (1) the Novel Taxane/BMS Compound in question which is subsequently chemically transformed into the product commercialized by BMS, its Affiliates or its Sublicensees or (2) a compound which is subsequently chemically transformed into the product (being the Novel Taxane/BMS Compound in question) commercialized by BMS, its Affiliates or its Sublicensees or (ii) the CPI-Covered Product in question is a Novel Taxane/BMS Compound or, as commercialized by BMS, its Affiliates or its Sublicensees, is produced using a Novel Taxane/BMS Compound as a starting material and in either case is produced otherwise than using the RDI-Intellectual Property Rights; or where (A) the WSURF-Covered Product in question is an Indirect WSURF-Covered Product or (B) the WSURF-Covered Product, as commercialized by BMS, its Affiliates or its Sublicensees, is produced otherwise than using a WSURF-Covered Cell Line.

(c) In the event that the WSURF-Technology is incorporated into a cell line not covered by the RDI-Intellectual Property Rights which cell line is in-licensed by BMS otherwise than pursuant to this Agreement and from a party not an Affiliate of BMS (in which case a product produced by such cell line

would be a WSURF-Covered Product but not an RDI-Licensed Product), the Applicable Royalty Rate for such WSURF-Covered Product shall be: (a) [] or (b) [], whichever is higher, where

A = the Applicable Royalty Rate as otherwise determined in accordance with Clause (a) or (b) above, as the case may be

B = the royalty rate at which BMS is required to pay royalties otherwise than pursuant to this Agreement in respect of such WSURF-Covered Product.

For the avoidance of doubt, there shall be no stacking of royalties that would otherwise result from Clauses (a) and (b) above both applying to the same product (in any such case, Clause (b) shall control and supersede Clause (a)); and, in each of the two tables above, the amounts under the heading ""Portion of Annual Net Sales" refer to only the amounts of Net Sales of the

3

particular product in question (for example, only Net Sales of TAXOL-Registered Trademark- containing paclitaxel made by BMS using the RDI-Intellectual Property Rights (as a direct fermentation product) are used to determine the Applicable Royalty Rate under the heading "Pac/Direct" in Clause (a) above).

1.3 "CONFIDENTIAL INFORMATION" shall mean the collection of technical information included in the Other Licensed Property or technical information of BMS, all information required to be kept confidential by CPI pursuant to the terms of the RDI/CPI License Agreement or the WSURF/CPI License Agreement, and confidential non-public information concerning BMS's or CPI's business plans, strategy and the like. All information which shall be disclosed in confidence by the disclosing party to the receiving party, and which affords a competitive advantage to the disclosing party or its Affiliates, shall be presumed to be Confidential Information, even though limited portions of such technical information may be in the public domain.

The following information shall be excluded from the definition of Confidential Information: (a) information which the receiving party demonstrates was in the receiving party's possession in written or other tangible form prior to any disclosure; (b) information which the receiving party demonstrates was received from a Third Party which Third Party did not obtain the same, directly or indirectly, from the disclosing party; (c) information which is independently discovered or invented by personnel of a party who do not have direct or indirect access to the information provided to that party by the other party; or (d) from the time it becomes so known, any information which the receiving party demonstrates was in or subsequently enters the public domain.

1.4 "CPI-COVERED PRODUCTS" shall mean any product of BMS, its Affiliates or its Sublicensee that constitutes an RDI-Licensed Product or a WSURF-Covered Product, or both.

1.5 "DIRECT WSURF-COVERED PRODUCTS" shall have the same meaning as ascribed to the term "Direct Covered Products" in the WSURF Sublicense Agreement.

1.6 "EFFECTIVE DATE" shall mean the date first above written as the date of this Agreement.

1.7 "FDA" shall mean the United States Food and Drug Administration, or the successor thereto.

1.8 "FIRST COMMERCIAL SALE" shall mean, in each country in the Territory, the date that a CPI-Covered Product is first sold, marketed or publicly made available for sale. A CPI-Covered Product distributed or used for clinical trials or experimental purposes only shall not be considered sold, marketed or made publicly available and shall not establish the First Commercial Sale.

4

1.9 "IMPROVEMENTS" shall have the meaning set forth in Section 4.3(e).

1.10 "INDIRECT WSURF-COVERED PRODUCTS" shall have the same meaning as ascribed to the term "Indirect Covered Products" in the WSURF Sublicense Agreement.

1.11 "LICENSED CELL LINES" shall have the meaning set forth in Section 4.3(b).

1.12 "LICENSED CPI-TECHNOLOGY" shall have the meaning set forth in Section 4.3(d).

1.13 "LICENSED GENE MATERIALS" shall have the meaning set forth in Section 4.3(c).

1.14 "NET SALES" shall mean the gross revenues received by BMS, its Affiliates or its Sublicensees for CPI-Covered Products sold less the sum of the following deductions, where applicable: sales, use, tariff, import/export duties or other excise taxes imposed on particular sales; allowances, credits, chargebacks and refunds to non-affiliated third parties because of rejections, returns or price reduction of product; freight costs and insurance charges on shipments to customers included in invoiced amounts; and rebates and price reductions/adjustments required by law, regulations or contract. In the case of rebates and price reductions/adjustments required by contract, the same shall not be deductible to the extent that the contract in question is between Affiliates or related companies or the price concessions in question are given in connection with the marketing/sales of other product or products such as in the case of "bundling" of products.

1.15 "NEW CPI-TECHNOLOGY" shall mean, to the extent that they are not already included under the RDI-Intellectual Property Rights, the WSURF-Technology or the other Licensed Property, and regardless of whether or not the same may be covered by any patent or patentable: (a) any process, method or material relating to the production of paclitaxel or other taxanes, including, without limitation, any plant cell line created by WSU; (b) any theretofore unknown non-taxane compound having anticancer (therapeutic or prophylactic) utility isolated from microbial fermentation as a natural product; and (c) all knowhow, data and other enabling information relevant to the process, method, material or non-taxane compound referred to in Clause (a) or (b) above, in each case owned or controlled by CPI, now or in the future.

1.16 "NOVEL BMS COMPOUND FROM COVERED CELL LINE" shall the meaning ascribed to that term in the RDI-Sublicense Agreement.

1.17 "NOVEL BMS COMPOUND FROM FERMENTATION" shall have the meaning ascribed to that term in the RDI-Sublicense Agreement.

1.18 "NOVEL TAXANE/BMS COMPOUND" shall mean, in singular form, a Novel Taxane from Fermentation, Novel Taxane from Covered Cell Line, Novel BMS Compound from Fermentation or Novel BMS Compound from Covered Cell Line and, in plural form, any combination of Novel Taxanes from Fermentation, Novel Taxanes from Covered Cell Line,

5

Novel BMS Compounds from Fermentation and/or Novel BMS Compounds from Covered Cell Line, collectively.

1.19 "NOVEL TAXANE FROM COVERED CELL LINE" shall have the meaning ascribed to that term in the RDI-Sublicense Agreement.

1.20 "NOVEL TAXANE FROM FERMENTATION" shall have the meaning ascribed to that term in the RDI-Sublicense Agreement.

1.21 "OTHER LICENSED PROPERTY" shall mean, collectively, the Licensed Cell Lines, the Licensed Gene Materials, the Novel Taxanes from Fermentation, the Novel Taxanes from Covered Cell Line, the Licensed CPI-Technology and the Improvements, together with all patent rights pertaining thereto, to the extent that such patent rights are not already part of the RDI-Intellectual Property Rights or the WSURF-Technology.

1.22 "PARTY" shall mean CPI or BMS and, when used in the plural, shall mean CPI and BMS.

1.23 "PERSON" shall mean any natural person, corporation, firm, business trust, joint venture, association, organization, company, partnership or other business entity, or any government or any agency or political subdivision thereof, or any organization which can exercise independent legal standing.

1.24 "RDI-INTELLECTUAL PROPERTY RIGHTS" shall have the same meaning as ascribed to the term "Intellectual Property Rights" in the RDI-Sublicense Agreement.

1.25 "RDI-LICENSED PRODUCTS" shall have the same meaning as ascribed to the term "Licensed Products" in the RDI Sublicense Agreement.

1.26 "RDI-SUBLICENSE AGREEMENT" shall have the meaning set forth in Section 4.1.

1.27 "WSURF-COVERED CELL LINES" shall have the same meaning as ascribed to the term "Covered Cell Lines" in the WSURF Sublicense Agreement.

1.28 "WSURF-COVERED PRODUCTS" shall have the same meaning as ascribed to the term "Covered Products" in the WSURF Sublicense Agreement.

1.29 "WSURF-SUBLICENSE AGREEMENT" shall have the meaning set forth in Section 4.2.

1.30 "WSURF-TECHNOLOGY" shall have the same meaning as ascribed to the term "Technology" in the WSURF Sublicense Agreement.

6

1.31 "SUBLICENSEE" shall mean any non-Affiliate Third Party who is granted sublicense rights by BMS pursuant to this Agreement, the RDI-Sublicense Agreement or the WSURF-Sublicense Agreement.

1.32 "TERRITORY" shall mean the entire world.

1.33 "THIRD PARTY" shall mean any Person who or which is neither a Party nor an Affiliate of a Party.

2. REPRESENTATIONS AND WARRANTIES.

2.1 REPRESENTATIONS AND WARRANTIES OF BOTH PARTIES. Each Party represents and warrants to the other Party that: (i) it is free to enter into this Agreement; (ii) in so doing, it will not violate any other agreement to which it is a party; (iii) it has taken all corporate action necessary to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement; and (iv) no Person has or will have, as a result of the transactions contemplated by this Agreement, any right, interest or valid claim against or upon such Party for any commission, fee or other compensation as a finder or broker because of any act or omission by such Party or any of its agents.

2.2 REPRESENTATIONS AND WARRANTIES OF CPI. CPI he represents and warrants to BMS that:

(a) Each of the RDI/CPI License Agreement and the WSURF/CPI License Agreement is in full force and effect; CPI has complied with all provisions of each such agreement; there does not exist any event of default with respect to CPI under any said agreement which, after notice or lapse of time or both, would constitute an event of default with respect to CPI under said agreement; and CPI has no knowledge of any breach or anticipated breach by any other party to any said agreement;

(b) CPI has all consents necessary to grant the rights and licenses granted to BMS under this Agreement;

(c) Without having conducted any investigation, to the best of CPI's knowledge, all of the patents constituting part of the RDI-Intellectual Property Rights or the WSURF-Technology in existence on the Effective Date are valid and

enforceable and have been maintained to date; and

(d) CPI has not entered into any agreement with any Third Party which is in conflict with the rights granted to BMS pursuant to this Agreement.

3. PRODUCT DEVELOPMENT.

7

3.1 DEVELOPMENT BY BMS.

(a) BMS shall use commercially reasonable efforts to develop, and where appropriate to obtain legal and regulatory approval for, the RDI-Intellectual Property Rights, the WSURF-Technology and the Other Licensed Property with a view to using the same, either alone or in combination with each other or with other technologies, for the commercial production of taxanes and other compounds, as applicable, to be used as the active ingredients in BMS's products.

(b) BMS shall use commercially reasonable efforts to market and sell each CPI-Covered Product in each country in the Territory as soon as practicable following receipt of all governmental approvals in such country necessary therefor.

3.2 SPONSORED RESEARCH AND DEVELOPMENT.

(a) BMS agrees to provide funding to CPI in the amount of [], at the rate of [] per each 12-month period, to enable CPI to continue research and development. To that end, the Parties have concurrently with the execution of this Agreement, entered into a sponsored research agreement (the "Research Agreement") containing a mutually agreed outline of research description and resource allocation. A portion of the sponsored research and development activities may be undertaken by, and accordingly a portion of the BMS funding may be paid over by CPI to, MSU and/or WSU.

(b) BMS's funding of CPI's research and development activities will be subject to extension beyond the initial [] 12-month periods as and if mutually agreed by the Parties.

(c) BMS's funding commitment under this Section 3.2 shall survive any termination of this Agreement pursuant to Section 12.3, unless such termination occurred by reason of failure by CPI to comply with any of the material obligations on its part contained in this Agreement.

4. GRANT OF RIGHTS.

4.1 GRANT OF SUBLICENSE UNDER RDI/CPI LICENSE AGREEMENT. Subject to Section 4.5 below, CPI grants to BMS an exclusive sublicense, under the RDI/CPI License Agreement, pursuant to the terms and conditions set forth in the Sublicense Agreement by and between BMS and CPI, dated as of May 27, 1998 (the "RDI-SUBLICENSE AGREEMENT").

4.2 GRANT OF SUBLICENSE UNDER WSURF/CPI LICENSE AGREEMENT. Subject to Section 4.5 below, CPI grants to BMS an exclusive sublicense, under the WSURF/CPI License

8

Agreement, pursuant to the terms and conditions set forth in the Sublicense Agreement by and between BMS and CPI, dated as of May 19, 1998 (the "WSURF-SUBLICENSE AGREEMENT").

4.3 OTHER LICENSED PROPERTY.

(a) Subject to Section 4.5 below, CPI hereby grants to BMS an exclusive, worldwide license, under the Other Licensed Property to make, have made, use and sell CPI-Covered Products and otherwise to use the Other Licensed Property to make, have made, use and sell human and animal health care products.

(b) For purposes of this Agreement, "LICENSED CELL LINES" means, collectively, the cells lines listed on SCHEDULE 4.3(b) hereto and all other paclitaxel and other taxane-producing microbial cell lines in CPI's possession now or in the future. CPI shall from time to time promptly provide BMS with suspension (or another form, if appropriate) culture samples of any Licensed Cell Line or Improvement thereto that is then in its possession, or use its best efforts to obtain such samples from RDI and Montana State University ("MSU"), in each case as BMS shall reasonably request.

(c) For purposes of this Agreement, "LICENSED GENE MATERIALS" means, collectively, the structural genes, genetic sequences, promoters, enhancers, probes, linkage probes, vectors, plasmids, transformed cell lines, proteins, biological modifiers, antigens and antibodies relating to the enzymes listed on SCHEDULE 4.3(c) hereto and all other such types of materials relating to the biosynthesis of paclitaxel and other taxanes, including those relating to other enzymes, in CPI's possession now or in the future. CPI shall from time to time promptly provide BMS with samples, in an appropriate form, of any Licensed Gene Material or Improvement thereto that is then in its possession, or use its best efforts to obtain such samples from WSURF and Washington State University ("WSU"), in each case as BMS shall reasonably request.

(d) For purposes of this Agreement, "LICENSED CPI-TECHNOLOGY" means, collectively, regardless of whether or not the same may be covered by any patent or patentable, (i) the process and method of using microbial fermentation, including the use of any Licensed Cell Line, including any WSURF-Covered Cell Line or any other cell line constituting an Improvement, to produce paclitaxel or any other taxane (including the use thereof as an intermediate or precursor for the production of other chemical entities); (ii) the process and method of using any Licensed Gene Material or any other genetic material constituting an Improvement to produce a WSURF-Covered Cell Line; and (iii) all such know-how, data and other enabling information in CPI's possession now or in the future as are relevant to such processes and methods or otherwise relevant to BMS's development and use of microbial fermentation for the production of paclitaxel or other taxanes, including the use of any Licensed Cell Line or WSURF-COVERED Cell Line, as contemplated hereby, including, without limitation, those pertaining to cell preservation, stability, propagation, production media and genetic engineering to create WSURF-Covered Cell Lines and other conditions, use of growth

9

regulators and promoters and technology for the enhancement of paclitaxel or other taxane production. CPI shall promptly transfer to BMS all know-how, data and enabling information includable under the Licensed CPI-Technology or any Improvement thereto and use its best efforts to obtain the same from RDI and MSU or WSURF and WSU, as the case may be, in each case as BMS shall reasonably request.

(e) For purposes of this Agreement, "IMPROVEMENTS" means, collectively, regardless of whether the same may be covered by any patent or patentable, (A) with respect to any Licensed Cell Line or WSURF-Covered Cell Line: (i) all improved, enhanced or otherwise modified forms of, and other improvements to, such Licensed Cell Line by whatsoever means accomplished (including by way of artificial genetic manipulation, natural genetic mutation and alternative cell screening and selection method); (ii) all progeny and derivatives of such Licensed Cell Line or WSURF-Covered Cell Line; and (iii) all DNA sequences derived from such Licensed Cell Line, WSURF-Covered Cell Line or any of the items referred to in clause (i) or (ii) above; (B) with respect to any Licensed Gene Material: (i) all improved, enhanced or otherwise modified forms of, and other improvements to, such Licensed Gene Material by whatsoever means accomplished (including by way of artificial enzymatic or chemical manipulation, natural genetic mutation and alternative cell screening and selection method); and (ii) all progeny and derivatives of such Licensed Gene Material; and (C) with respect to the Licensed CPI-Technology, all improvements, enhancements and other modifications to the know-how, data and other enabling information constituting Licensed CPI-Technology, in each case (A), (B) and (C) as the same may hereafter be developed or otherwise become owned or controlled by CPI. For the purpose of effectuating BMS's right to any Improvement, CPI shall from time to time, promptly upon its knowing the same, notify BMS of any fact or circumstance that may tend to suggest the existence of any Improvement.

(f) For purposes of ensuring the transfer of the Other Licensed

Property to BMS and assisting BMS in its development and application of the Other Licensed Property, CPI shall, upon reasonable request of BMS, make available its technical personnel for consultation and other technical assistance and shall use its best efforts to cause RDI and MSU or WSURF and WSU, as the case may be, to provide like consultation and assistance. BMS shall reimburse CPI's, together with such other parties' reasonable out-of-pocket expenses in connection with such consultation and assistance.

4.4 SUBLICENSE RIGHTS.

(a) BMS shall have the right to grant sublicenses to its Affiliates, provided that BMS shall guarantee and be responsible for the making of all payments due, and the making of reports under this Agreement, by reason of sales of any CPI-Covered Products by its Affiliates and their compliance with all applicable terms of this Agreement.

(b) BMS shall have the right to grant sublicenses to Sublicensees, provided that BMS shall guarantee and be responsible for the making of all payments due, and the making

10

of reports under this Agreement, by reason of sales of any CPI-Covered Products by its Sublicensees and their compliance with all applicable terms of this Agreement.

4.5 RESERVATION OF RIGHTS BY CPI. CPI may continue to pursue research and development, either on its own or in collaboration with BMS, MSU and/or WSU, but not with any other Third Party, in the field of microbial fermentation production of paclitaxel and other taxanes. More specifically, CPI shall retain the right to use the Other Licensed Property to make paclitaxel and other taxanes solely in pursuit of further research and development with respect to the Other Licensed Property and otherwise for non-commercial internal research and development purposes. CPI shall not be entitled to, and shall not, assign or sublicense such right to any Third Party. For the avoidance of doubt, CPI shall not be entitled to, and shall not, transfer any WSURF-Covered Cell Line, Licensed Cell Line or cell line constituting Improvement to any Third Party, nor shall CPI use the same, or any part of the RDI-Intellectual Property Rights, the WSURF-Technology or the Other Licensed Property, for the benefit of any Third Party; and CPI retains all rights to its technologies and intellectual property rights that are not covered by this Agreement.

5. UP-FRONT; MILESTONE AND ROYALTY PAYMENTS.

5.1 UP-FRONT FEE. As consideration to CPI for the grant of the sublicenses to BMS pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement and the license hereunder to the Other Licensed Property, BMS shall pay to CPI the sum of [], reduced by the sum of the up-front fees being made by BMS to CPI pursuant to Article III.A(1) of the RDI-Sublicense Agreement and Paragraph 3.1(a) of the WSURF Sublicense Agreement. Such up-front fee shall be paid within ten (10) business days of the execution of this Agreement by both Parties. Such sum shall be non-refundable.

5.2 MILESTONE PAYMENTS. As consideration to CPI for the sublicenses to BMS pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement and the license hereunder to the Other Licensed Property, BMS shall pay to CPI the following milestone payments upon the occurrence of each event set forth below:

(a) [] upon BMS's attainment, using a fungal strain furnished by CPI, of production level of not less than [] of paclitaxel, reduced by the sum of the corresponding payment being made by BMS to CPI pursuant to Article III.A(2) of the RDI Sublicense Agreement;

(b) the following amount or amounts, as applicable, depending on the attainable productivity and the actual primary products being pursued by BMS, in each case reduced by the sum of the corresponding payments being made by BMS to CPI pursuant to Article III.A(3) of the RDI-Sublicense Agreement and Paragraph 3.1(b) of the WSURF-Sublicense Agreement:

11

Milestone Payment	Productivity in mg/l		
	"Pac/Direct"	"Bac"	"TT"
[]	[]	[]	[]
[]	[]	[]	[]

As used in the foregoing table:

Productivity refers to commercially feasible production, using the RDI-Intellectual Property Rights, or using a WSURF-Covered Cell Line, of the product or products in question, of (i) the Direct WSURF-Covered Product in question or (ii) the compound or compounds which are subsequently converted into the Indirect WSURF-Covered Product in question, in each case with fermentation time per production cycle of not more than [].

"PAC/DIRECT" refers to where the primary fermentation product is paclitaxel or another product which is used by BMS in commercialization as such without further chemical transformation into a different compound or the primary product produced by the WSURF-Covered Cell Line in question is a Direct WSURF-Covered Product.

"BAC" refers to where the primary fermentation product is baccatin III used by BMS, its Affiliates or its Sublicensees as a starting material for the final commercial product or the primary product produced by the WSURF-Covered Cell Line in question is baccatin III used by BMS, its Affiliates or its Sublicensees as a starting material for the Indirect WSURF-Covered Product in question.

"TT" refers to where the primary fermentation product from using the RDI-Intellectual Property Rights is a mixture of miscellaneous taxanes used by BMS, its Affiliates or its Sublicensees as starting materials for the final commercial product or the primary product produced by the WSURF-Covered Cell Line in question is the mixture of miscellaneous taxanes used by BMS, its Affiliates or its Sublicensees as starting materials for the Indirect WSURF-Covered Product in question.

For the avoidance of doubt: (1) it shall not be implied that BMS is required, or otherwise intends, to pursue more than one of the "Pac/direct," "Bac" and "TT" alternatives; however, the milestone payments in respect of the two different levels of productivity, if attained, are cumulative); (2) each milestone payment shall be payable only once regardless of the number of times the same development milestone has been achieved using different cell lines; and (3) should BMS in fact be pursuing different primary products using a single cell line, the different milestone payments pertaining to each such different primary product shall become applicable.

(c) [] (in each case reduced by the sum of the corresponding payments being made by BMS to CPI pursuant to Article III.A(4) of the RDI-Sublicense Agreement and Paragraph 3.1(c) of the WSURF-Sublicense Agreement) upon the FDA's approval of a Supplemental New Drug Application (hereinafter called "SNDA") for using, or in the case of a product other than TAXOL-Registered Trademark- (which product is not a Novel Taxane/BMS Compound) a New Drug Application (including an Abbreviated New Drug Application, hereinafter called "NDA") that embodies the use of, (i) the RDI-INTELLECTUAL Property Rights for the commercial production of paclitaxel as the active ingredient in BMS's product TAXOL-Registered Trademark- or such other product or (ii) the use of, a WSURF-Covered Cell Line for the commercial production of paclitaxel as the active ingredient in BMS's product TAXOL-Registered Trademark- or such other product, in each case as a Direct WSURF-Covered Product;

(d) [] (in each case reduced by the sum of the corresponding

payments being made by BMS to CPI pursuant to Article III.A(5) of the RDI-Sublicense Agreement and Paragraph 3.1(d) of the WSURF-Sublicense Agreement) upon the FDA's approval of an SNDA for using, or in the case of a product other than TAXOL-Registered Trademark- (which product is not a Novel Taxane/BMS Compound) an NDA that embodies the use of, (i) the RDI-Intellectual Property Rights for commercial production of baccatin III to serve as a starting material for TAXOL-Registered Trademark- or such other product, as the case may be, or (ii) a WSURF-Covered Cell Line for the commercial production of baccatin III to serve as a starting material for TAXOL-Registered Trademark- or such other product, as the case may be, as an Indirect WSURF-Covered Product;

Clause (c) above and this Clause (d), together, shall not imply that BMS is required, or otherwise intends, to pursue both alternatives.

(e) [] (in each case reduced by the sum of the corresponding payments being made by BMS to CPI pursuant to Article III.A(5) of the RDI-Sublicense Agreement and Paragraph 3.1(d) of the WSURF-Sublicense Agreement) upon the FDA's approval of an Investigational New Drug Application covering a Novel Taxane/BMS Compound; and

(f) [] (in each case reduced by the sum of the corresponding payments being made by BMS to CPI pursuant to Article III.A(6) of the RDI-Sublicense Agreement and Paragraph 3.1(e) of the WSURF-Sublicense Agreement) upon the FDA's approval of a NDA covering a Novel Taxane/BMS Compound.

Each of the payments required pursuant to this Section 5.2 shall be paid within 30 days after such milestone has been achieved, and shall be non-refundable.

5.3 EARNED ROYALTY PAYMENTS. As consideration to CPI for the sublicenses to BMS pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement and the license hereunder to the Other Licensed Property, during the term of this Agreement, BMS shall pay to CPI a royalty on Net Sales of any CPI-Covered Product commencing on the First Commercial Sale of such CPI-Covered Product by BMS, its Affiliates or its Sublicensees at the

13

Applicable Royalty Rate, reduced by the sum of the corresponding payments being made by BMS to CPI pursuant to Article III.C of the RDI-Sublicense Agreement and Paragraph 3.1(g) of the WSURF-Sublicense Agreement.

5.4 MINIMUM ROYALTIES. In consideration of the maintenance of the sublicenses to BMS pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement and the license hereunder to the other Licensed Property, from and after BMS attains a commercially feasible production level of at least [] of paclitaxel using the RDI-Intellectual Property Rights and/or a WSURF-Covered Cell Line, BMS shall pay CPI a minimum royalty of [] (reduced by the corresponding payments being made by BMS to CPI pursuant to Article III.B of the RDI-Sublicense Agreement) per each consecutive 12-month period, which shall be payable within 30 days of the initial attainment of such production level and subsequently within 30 days of each anniversary of such attainment. The minimum royalties paid under this Section 5.4 shall not be refundable, but shall be fully creditable towards current and future earned royalties under Section 5.3 above.

5.5 SHARING OF FEES FROM SUBLICENSEES. BMS shall promptly pay over to CPI [] of whatever license fee or milestone payments that it receives from any Sublicensee on account of its sublicensing of the RDI-Intellectual Property Rights, the WSURF-Technology or both.

5.6 NO STACKING. The obligation to pay royalties to CPI under this Section 5 is imposed only once with respect to the same unit of CPI-Covered Product regardless of the extent to which the RDI-Intellectual Property Rights, the WSURF-Technology and/or the Other Licensed Property cover the product in question.

5.7 AMOUNTS PAID TO PRIMARY LICENSORS. This Agreement provides that each up-front, milestone or royalty payment due CPI hereunder shall be net of

the amounts of the corresponding payments to CPI pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement. Such crediting of the amount paid under either the RDI-Sublicense Agreement or the WSURF-Sublicense Agreement against the amount of the corresponding payment under this Agreement shall continue to be in effect even if at that time the RDI-Sublicense Agreement has been assumed by RDI in place of CPI or the WSURF-Sublicense Agreement has been assumed by WSURF in place of CPI, as the case may be.

6. PAYMENTS AND REPORTS.

6.1 REPORTS; PAYMENTS. Except as otherwise specifically provided in this Agreement, all payments due under this Agreement shall be paid quarterly within 50 days after the end of each calendar quarter. Each such payment for earned royalties shall be accompanied by a statement, CPI-Covered Product-by-CPI-Covered Product and country-by-country, of the amount of Net Sales during such quarter and the amount of royalties due on such Net Sales.

14

6.2 MODE OF PAYMENT. All payments due under this Agreement shall be paid by wire transfer of funds to an account at CPI's designated bank in the United States, and shall be paid in U.S. Dollars, calculated at BMS's customary internal corporate monthly exchange rates for the last month of the calendar quarter for which remittance is made for royalties. For each month and each currency, BMS's customary internal corporate monthly exchange rate shall equal the arithmetic average of the daily exchange rates (obtained as described below) during the period from (i) the 20th day of the preceding month (or, if such 20th day is not a business day, the immediately preceding business day) through (ii) the 19th day of the current month (or, if such 19th day is not a business day, the immediately preceding business day); each daily exchange rate shall be obtained from the Reuters Daily Rate Report or The Wall Street Journal, Eastern U.S. Edition, or, if not so available, as furnished by BMS's local Affiliates.

6.3 WITHHOLDING TAX. Any and all withholding taxes or similar charges imposed by any government on amounts due from BMS, its Affiliates or its Sublicensees will be deducted from the amounts due CPI, will be paid by the payer to the proper taxing authority, and proof of payment of said tax will be secured and sent to CPI as evidence of such payment.

6.4 RECORDS RETENTION. BMS and its Affiliates and Sublicensees shall keep accurate records of all operations affecting payments hereunder, and shall permit CPI or its duly authorized agent to inspect all such records and to make copies of or extracts from such records during regular business hours throughout the term of this Agreement and for a reasonable period of not less than 3 years thereafter.

6.5 AUDIT REQUEST. At the request and expense of CPI, BMS and its Affiliates and Sublicensees shall permit an independent, certified public accounting firm appointed by CPI and reasonably acceptable to BMS, at reasonable times and upon reasonable notice, to examine those records as may be necessary to: (i) determine the correctness of any report or payment made under this Agreement; or (ii) obtain all information as to Net Sales and the royalties payable for any calendar quarter. Such accounting firm shall not disclose to CPI any information other than information relating to said reports, royalties and payments. Results of any such examination shall be made available to both Parties.

6.6 COST OF AUDIT. CPI shall bear the full cost of the performance of any such audit except as hereinafter set forth. If, as a result of any inspection of the books and records of BMS, its Affiliates or its Sublicensees, it is shown that BMS's payments under this Agreement were less than the amount which should have been paid, then BMS shall make all payments required to be made to eliminate any discrepancy revealed by said inspection within 30 days after CPI's demand therefor. Furthermore, if the payments were less than the amount which should have been paid by an amount in excess of five percent of the payments actually made during the period in question, BMS shall also reimburse CPI for the costs of such audit in addition to the payment required to be made to eliminate any discrepancy.

7. INDEMNIFICATION.

7.1 INDEMNIFICATION.

(a) CPI shall defend, indemnify and hold BMS and its Affiliates and Sublicensees, and each of their respective directors, officers and employees, harmless from and against any and all claims, suits or demands for liability, damages, losses, costs and expenses (including the costs and expenses of attorneys and other professionals) arising out of Third Party claims or suits resulting from a breach of CPI's representations and warranties set forth in Section 2.

(b) BMS shall defend, indemnify and hold CPI, its Affiliates, and their respective directors, officers and employees, harmless from and against any and all claims, suits or demands for liability, damages, losses, costs and expenses (including the costs and expenses of attorneys and other professionals) arising out of: (i) Third Party claims or suits resulting from (1) a breach of BMS's representations and warranties set forth in Section 2, (2) the manufacture, packaging, use, sale, rental or lease of CPI-Covered Products or (3) the use of the RDI-Intellectual Property Rights, the WSURF-Technology or the Other Licensed Property by BMS, its Affiliates or its Sublicensees.

7.2 CONDITIONS TO INDEMNIFICATION. A person or entity that intends to claim indemnification under Section 7.1 (the "Indemnitee") shall promptly notify the other Party (the "Indemnitor") of any loss, claim, damage, liability or action in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof with counsel mutually satisfactory to the Indemnitee whether or not such claim is rightfully brought; provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor if Indemnitor does not assume the defense, or if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other person represented by such counsel in such proceedings. The indemnity agreement in Section 7.1 shall not apply to amounts paid in settlement of any loss, claim, damage, liability or action if such settlement is effected without the consent of the Indemnitor, which consent shall not be withheld or delayed unreasonably. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, only if prejudicial to its ability to defend such action, shall relieve such Indemnitor of any liability to the Indemnitee under Section 7.1, but the omission so to deliver notice to the Indemnitor will not relieve it of any liability that it may have to any Indemnitee otherwise than under Section 7.1. The Indemnitee under Section 7.1, its officers, directors, employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigations of any action, claim or liability covered by this indemnification.

8. PATENT PROSECUTION AND MAINTENANCE.

8.1 CERTAIN PATENTABLE INVENTIONS. CPI shall promptly inform BMS of any patentable invention discovered, conceived or reduced to practice by CPI that may constitute a part of the Other Licensed Property. CPI shall diligently prosecute and maintain all patent applications (including, without limitation, such patent applications in such countries as BMS may request) and patents. CPI shall provide BMS with copies of all relevant documentation so that BMS will be given an opportunity in advance to provide reasonable comments thereon and may otherwise be informed and apprised of the prosecution. BMS agrees to keep such documentation confidential. BMS shall promptly upon CPI's presentment of invoice reimburse CPI for all related costs of patent preparation, filing and maintenance incurred by CPI from and after the date hereof with respect to the Other Licensed Property.

8.2 TRADE SECRET PROTECTION. Recognizing that proprietary rights and interests in certain aspects of the technology in the field may be better protected by way of trade secrets or other legal doctrines rather than by patents, the Parties agree to consult with each other, on a case-by-case basis, with a view to arriving at a consensus as to whether to file, or to withdraw after filing, a patent application.

8.3 PATENT EXTENSION. Either Party shall be entitled to apply for an extension of the term of any patent included within the Other Licensed Property if appropriate under any applicable law in any jurisdiction. If a Party decides to apply for said extension, it shall notify the other Party, who shall cooperate by supplying all documents in its possession and signing all papers which may be necessary to apply for said extension. The Party applying for said extension shall not be liable to the other Party for any failure to obtain said extension.

9. PATENT ENFORCEMENT.

9.1 OTHER LICENSED PROPERTY. For the avoidance of doubt, the provisions of this Section 9 govern with respect to any matter only to the extent that such matter is not governed by Article IX of the RDI-Sublicense Agreement or Article VII of the WSURF-Sublicense Agreement.

9.2 THIRD PARTY INFRINGEMENT.

(a) In the event of any infringement by a Third Party of any aspect of the Other Licensed Property, BMS shall have the first right (but not the obligation) to pursue any and all injunctive, compensatory and other remedies and reliefs (collectively, "REMEDIES") against such Third Party. Should BMS determine not to pursue Remedies within 180 days after written notice from CPI requesting BMS to do so, then CPI shall have the right (but not the obligation) to pursue Remedies against such Third Party.

(b) The Party pursuing Remedies shall bear its own costs and expenses and shall be entitled to retain all damages and other recoveries or awards. Such Party shall be entitled from any damages, awards or other recovery to cover its costs and expenses; any remaining

17

balance shall be used to cover the costs and expenses, if any, of the other Party and then shared 75% to the Party pursuing Remedies and 25% to the other Party.

(c) Each Party agrees to cooperate, at its own costs and expense, with the other in the latter's pursuit of Remedies. Any pursuit of Remedies will be controlled by the Party initiating the pursuit.

10. CERTAIN RIGHT TO NEW CPI-TECHNOLOGY.

10.1 RIGHT OF FIRST NEGOTIATION.

(a) BMS shall have a right of first negotiation, during the term of this Agreement, to obtain from CPI an exclusive, worldwide, royalty-bearing license or sublicense, as applicable (with the right to grant sublicenses) to all or a part of any New CPI-Technology. Accordingly, CPI shall not license or sublicense any part of any New CPI-Technology without first complying with the provisions of Clauses (b) and (c) below.

(b) A ninety (90) day negotiation period (the "Negotiation Period") shall commence upon CPI, reasonably believing that sufficient data exist for evaluating the New Technology in question, giving written notice to BMS to the effect of its intention to out-license such New CPI-Technology. If BMS exercises its right of first negotiation within thirty (30) days of receipt of such notice, the Parties shall promptly commence, and continue, negotiation in good faith with a view to entering into an agreement containing customary, commercially reasonable terms and conditions in implementation of an appropriate license, which terms and conditions may include those relating to product development plans and commitments. If BMS does not exercise its right of first negotiation within such thirty-day period by giving written notice to CPI, it shall have no further right under this Section 10.1 with respect to the New CPI-Technology in question.

(c) In the event that the Parties fail to reach an agreement within the Negotiation Period, then (and only then) may CPI offer the New CPI-Technology in question to a Third Party, provided that, within the next eighteen (18) months, CPI may not conclude any transaction with any Third Party on terms less advantageous to CPI than those last offered to BMS without first offering such less advantageous terms to BMS. ANY OFFER SO MADE TO BMS SHALL BE SUFFICIENT IF IT DISCLOSES IN SUMMARY FASHION: (i) THE RIGHTS

OF INTERESTS INVOLVED; (ii) THE DEGREE, IF ANY, TO WHICH THE LICENSE OR SUBLICENSE, AS THE CASE MAY BE, IS EXCLUSIVE; (iii) THE ROYALTIES OR OTHER CONSIDERATION TO BE PAID TO CPI; (iv) THE TERRITORIES COVERED; (v) THE TERMS OF ANY IMPROVEMENTS LICENSE OR IMPROVEMENTS BACKLICENSE; AND (v) THE TERM OF THE LICENSE OR SUBLICENSE, AS THE CASE MAY BE. BMS SHALL HAVE 45 DAYS FROM ITS RECEIPT THEREOF TO DETERMINE WHETHER IT WISHES TO ACCEPT SUCH OFFER.

11. CONFIDENTIALITY AND NON-USE.

18

11.1 NOTIFICATION. The Parties recognize the importance of the protection of inventions, discoveries and other developments by patent or under the doctrine of trade secrets. Consequently, any proposed publication by either Party of the same shall be subject to the provisions of this Section 11. At least 60 days before a manuscript is to be submitted to a publisher, the publishing Party will provide the other Party with a copy of the manuscript. If the publishing Party wishes to make an oral presentation, it will provide the other Party with a copy of the abstract (if one is submitted) or otherwise a summary of the contents of the proposed publication at least 40 days before it is to be submitted. The publishing Party will also provide to the other Party a copy of the text of the presentation, including all slides, posters, and any other visual aids, at least 40 days before the presentation is made.

11.2 REVIEW OF PROPOSED PUBLICATIONS. The receiving Party will review the manuscript, abstract, summary, text or any other material provided under Section 11.1 to determine if patentable subject matter is disclosed or if the publication would jeopardize any desirable trade secret claim. The reviewing Party will notify the publishing Party within 30 days of receipt of the proposed publication if the reviewing Party, in good faith, determines that patentable subject matter is or may be disclosed or trade secret protection may be at stake, or if the reviewing Party, in good faith, believes Confidential Information or proprietary information is or may be disclosed. If it is determined by the reviewing Party that patent applications should be filed, the publishing Party shall delay its publication or presentation for a period not to exceed 90 days from the reviewing Party's receipt of the proposed publication to allow time for the filing of patent applications covering patentable subject matter. In the event that the delay needed to complete the filing of any necessary patent application will exceed the 90 day period, the Parties will discuss the need for obtaining an extension of the publication delay beyond the 90 day period. If it is determined that trade secret protection is at stake, the publishing party shall eliminate from publication such materials as are reasonable to preserve trade secret protection. If it is determined in good faith by the reviewing Party that Confidential Information or proprietary information is being disclosed, the Parties will consult in good faith to arrive at an agreement on mutually acceptable modifications to the proposed publication to avoid such disclosure.

11.3 CONFIDENTIALITY AND NON-USE; EXCEPTIONS. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that, for the term of this Agreement and for five (5) years thereafter the receiving Party and its Affiliates and Sublicensees shall keep, and shall ensure that its officers, directors, employees and agents keep, completely confidential and shall not publish or otherwise disclose and shall not use for any purpose any Confidential Information furnished to it by the other Party or its Affiliates or Sublicensees or developed under this Agreement.

11.4 AUTHORIZED DISCLOSURE. Each Party may disclose the other's data and information, including Confidential Information, to its Affiliates, licensors and Sublicensees, and its and their officers, directors, employees and outside consultants, as reasonably necessary, and to others to the extent such disclosure is reasonably necessary in filing or prosecuting patent applications, prosecuting or defending litigation, complying with applicable governmental laws and

19

regulations, undertaking basic research with outside collaborators, conducting preclinical or clinical trials or pursuing product registrations provided that if a Party is required to make any such disclosure of the other Party's Confidential Information it will, except where impracticable for

necessary disclosures, for example to physicians conducting studies or to health authorities, give reasonable advance notice to the other Party of such disclosure requirement and, except to the extent inappropriate in the case of patent applications, will use all reasonable efforts to secure confidential treatment of such information required to be disclosed.

12. TERM; TERMINATION.

12.1 TERM. This Agreement shall commence as of the Effective Date and, unless sooner terminated as provided hereunder, shall expire, as to each CPI-Covered Product in each country in the Territory, upon the later to occur of: (a) 10 years from the First Commercial Sale of such CPI-Covered Product in such country; or (b) such time as neither the making, use nor sale at the time by BMS, its Affiliates or Sublicensees in such country of such CPI-Covered Product, without giving effect to the sublicenses pursuant to the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement and the license hereunder to the Other Licensed Property, would infringe any patent included in the RDI-Intellectual Property Rights, the WSURF-Technology or the Other Licensed Property, it being understood that the term "patent" shall include any patent that may issue upon any pending patent application being prosecuted diligently by or on behalf of RDI, WSURF or CPI, as the case may be. Following such expiration, on a country-by-country basis, BMS shall retain a paid-up, non-exclusive licenses as otherwise provided in Sections 4.1., 4.2 and 4.3. This Agreement shall expire in its entirety upon its expiration with respect to all CPI-Covered Products in all countries in the Territory as provided in the foregoing.

12.2 BREACH. Failure by BMS to comply with any of the material obligations on its part contained in this Agreement shall entitle CPI to give notice to BMS specifying the nature of the default and requiring it to cure such default. If such default is not cured within 60 days after the receipt of such notice (or, if such default cannot be cured within such 60 day period, if BMS does not commence and diligently continue actions to cure such default), CPI shall be entitled, without prejudice to any of its other rights conferred on it by this Agreement, in addition to any other remedies available to it by law or in equity, to terminate this-Agreement by giving written notice to take effect immediately. The right to terminate this Agreement, as hereinabove provided, shall not be affected in any way by CPI's waiver or failure to take action with respect to any previous default.

12.3 TERMINATION BY BMS.

(a) BMS shall be entitled at any time, other than during the first six months following the date hereof, to terminate this Agreement in whole by giving notice in writing to CPI. Such termination shall be effective 90 days from the date of such notice. Upon such termination, each of the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement

20

shall forthwith terminate, regardless of whether BMS has invoked its right to terminate such agreements pursuant to Article VI.A of the RDI-Sublicense Agreement and Paragraph 12.3 of the WSURF-Sublicense Agreement, respectively.

(b) In the event that BMS terminates both the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement pursuant to Article VI.A of the RDI-Sublicense Agreement and Paragraph 12.3 of the WSURF-Sublicense Agreement, this Agreement shall forthwith terminate, regardless of whether BMS has invoked its right to terminate this Agreement pursuant to this Section 12.3.

12.4 EFFECT OF TERMINATION.

(a) Termination, relinquishment or expiration of this Agreement for any reason shall be without prejudice to any rights which shall have accrued to the benefit of either Party prior to such termination, relinquishment or expiration, including, without limitation, BMS's continued obligation to make royalty payments, license fee payments and reports, if any, as provided in Sections 5 and 6 above. Such termination, relinquishment or expiration shall not relieve either Party from obligations which are expressly indicated to survive termination or expiration of this Agreement.

(b) All of the Parties' rights and obligations under Sections 3.2, 7 and 11 shall survive termination or expiration.

12.5 RIGHT TO SELL STOCK ON HAND. If BMS is not in material breach of this Agreement at the time of termination of this Agreement, then BMS, its Affiliates and its Sublicensees shall have the right for one year thereafter to dispose of all Licensed Products then in its inventory, and shall pay royalties thereon, in accordance with the provisions of this Agreement, as though this Agreement had not terminated.

12.6 TERMINATION OF SUBLICENSES. Upon any termination of this Agreement, all sublicenses-granted by BMS under this Agreement shall terminate simultaneously, subject, nevertheless, to Section 12.5 above.

12.7 BANKRUPTCY.

(a) Either Party may, by Notice to the other Party, terminate this Agreement as a whole if such other Party becomes insolvent, makes an assignment for the benefit of creditors, becomes the subject of proceedings in voluntary or involuntary bankruptcy instituted on behalf of or against such other party, or has a receiver or trustee appointed for all or substantially all of its property; provided, however, that, in the case of an involuntary bankruptcy proceeding, such right to terminate shall become effective only if such other Party consents to the involuntary bankruptcy or such proceeding is not dismissed within ninety (90) days following the filing thereof.

21

(b) All rights and licenses granted under or pursuant to each of this Agreement, the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement by one Party to the other are, for all purposes of Section 365(n) of Title 11 of the United States Code ("TITLE 11"), licenses of rights to "intellectual property" as defined in Title 11. Each Party agrees during the term of this Agreement to create and maintain current copies to the extent practicable of all such intellectual property. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against one party under Title 11, the other Party shall be entitled to a complete duplicate of any and all such intellectual property and all embodiments of such intellectual property, and the same, if not already in the possession of such other Party, shall be promptly delivered to it (a) upon such other Party's written request following the commencement of such bankruptcy proceeding, unless the Party subject to such bankruptcy proceeding, or its trustee or receiver, elects to continue to perform all of its obligations under each of this Agreement, the RDI-Sublicense Agreement and the WSURF-Sublicense Agreement, or (b) if not delivered as provided under Clause (a) above, upon such other Party's request following the rejection of this Agreement, the RDI-Sublicense Agreement or the WSURF-Sublicense Agreement by-or on behalf of the Party subject to such bankruptcy proceeding.

13. MISCELLANEOUS.

13.1 RELATIONSHIP OF PARTIES. Nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, employer-employee or joint venture relationship between the Parties. No Party shall incur any debts or make any commitments for the other, except to the extent, if at all, specifically provided herein.

13.2 FORCE MAJEURE. Neither Party shall be liable to the other for loss or damages or shall have any right to terminate this Agreement for any default or delay attributable to any act of God, flood, fire, explosion, strike, lockout, labor dispute, shortage of raw materials, casualty or accident, war, revolution, civil commotion, act of public enemies, blockage or embargo, injunction, law, order, proclamation, regulation, ordinance, demand or requirement of any government or subdivision, authority or representative of any such government, or any other cause beyond the reasonable control of such Party, if the Party affected shall give prompt notice of any such cause to the other Party. The Party giving such notice shall thereupon be excused from such of its obligations hereunder as it is thereby disabled from performing for so long as it is so disabled and for 30 days thereafter. Notwithstanding the foregoing, nothing in this Section 13.2 shall excuse or suspend the obligation to make any payment due hereunder in the manner and at the time provided.

13.3 ASSIGNMENT. Neither Party shall be entitled to assign its rights hereunder. No assignment and transfer shall be valid and effective unless and

until the assignee/transferee shall agree in writing to be bound by the provisions of this Agreement.

22

13.4 FURTHER ACTIONS. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

13.5 NOTICE. Any notice or request required or permitted to be given under or in connection with this Agreement shall be deemed to have been sufficiently given if in writing and personally delivered by messenger or express courier service (signature required), prepaid, to the Party for which such notice is intended, at the address set forth for such Party below:

(a) In the case of CPI, to:

Cytoclonal Pharmaceuticals Inc.
9000 Harry Hines Blvd., Suite 330
Dallas, Texas 75235
Attention: President

(b) In the case of BMS, to:

Bristol-Myers Squibb Company
Route 206 & Province Line Road
Princeton, New Jersey 08540
Attention: President, Technical Operations

or to such other address for such Party as it shall have specified by like notice to the other Party, provided that notices of a change of address shall be effective only upon receipt thereof. If sent by messenger or express courier service, the date of receipt (in the case of personal delivery) or dispatch (in the case of courier service) shall be deemed to be the date on which such notice or request has been given.

13.6 USE OF NAME. Except as otherwise provided herein, neither Party shall have any right, express or implied, to use in any manner the name or other designation of the other Party or any other trade name or trademark of the other Party for any purpose in connection with the performance of this Agreement.

13.7 PUBLIC ANNOUNCEMENTS. Except as required by applicable law, neither Party shall issue any press release or make any other public announcement concerning this Agreement or the subject matter hereof without the prior written consent of the other Party, which consent shall not be unreasonably withheld. In the event of a required press release or other public announcement, the Party making such announcement shall provide the other Party with a copy of the proposed text prior to such announcement. The Parties agree that if either is required to file this Agreement with any governmental agency, such Party will redact the financial terms of this Agreement to the extent possible in order to keep the financial terms of this Agreement confidential to the extent permitted by law.

23

13.8 COSTS AND EXPENSES. Except as otherwise expressly provided in this Agreement, each Party shall bear all costs and expenses associated with the performance of such Party's obligations under this Agreement.

13.9 WAIVER. A waiver by either Party of any of the terms and conditions of this Agreement in any instance shall not be deemed or construed to be a waiver of such term or condition for the future, or of any subsequent breach hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be in limitation of any other remedy, right, undertaking, obligation or agreement of either Party.

13.10 SEVERABILITY. When possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be

ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

13.11 AMENDMENT. No amendment, modification or supplement of any provisions of this Agreement shall be valid or effective unless made in writing and signed by a duly authorized officer of each Party.

13.12 GOVERNING LAW. THIS AGREEMENT SHALL BE GOVERNED BY AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PRINCIPLES.

13.13 ARBITRATION. Any dispute arising out of or relating to any provisions of this Agreement shall be finally settled by arbitration to be held in New York, New York, under the auspices and then current commercial arbitration rules of the American Arbitration Association. Such arbitration shall be conducted by three arbitrators appointed according to said rules. Judgment upon any award rendered may be entered in any court having jurisdiction, or application may be made to such court for a judicial acceptance of the award and an order of enforcement, as the case may be.

13.14 ENTIRE AGREEMENT. This Agreement, together with the RDI-Sublicense Agreement, the WSURF-Sublicense Agreement, the side letter agreement dated May, 19, 1998 entered into among BMS, CPI and WSURF, the side letter agreement dated May 27, 1998 entered into among BMS, CPI and RDI and the Research Agreement, sets forth the entire agreement and understanding between the Parties as to the subject matter hereof and merges all prior discussions and negotiations between them, and neither of the Parties shall be bound by any conditions, definitions, warranties, understandings or representations with respect to such subject matter other than as expressly provided herein or as duly set forth on or subsequent to the date hereof in

24

writing and signed by a proper and duly authorized officer or representative of the Party to be bound thereby.

13.15 COUNTERPARTS. This Agreement may be executed simultaneously in any number of counterparts, any one of which need not contain the signature of more than one Party but all such counterparts taken together shall constitute one and the same agreement.

13.16 DESCRIPTIVE HEADINGS. The descriptive headings of this Agreement are for convenience only, and shall be of no force or effect in construing or Interpreting any of the provisions of this, Agreement.

IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed and delivered by its duly authorized officer as of the day and year first above written.

CYTOCLONAL PHARMACEUTICS INC.

By: /s/ ARTHUR P. BOLLON

Arthur P. Bollon, Ph.D.
President and CEO

BRISTOL-MEYERS SQUIBB COMPANY

By: /s/ HAMED M. ABDOU

Hamed M. Abdou, Ph.D.
President, Technical Operations

25

SCHEDULE 4.3(b)

LIST OF CELL LINES

[]
[]
[]
[]
[]
[]
[]
[]
[]
[]
[]
[]
[]
[]
[]

SCHEDULE 4.3(c)

LIST OF ENZYMES AND RELATED GENE MATERIALS

- 1) Plasmid containing []
- 2) Plasmids containing []
- 3) Plasmids containing genes such as []

SUBLICENSE AGREEMENT
UNDER
RESEARCH & DEVELOPMENT INSTITUTE, INC. LICENSE AGREEMENT

THIS AGREEMENT, is made and entered into as of the 27th of May, 1998 ("AGREEMENT DATE"), by and between CYTOCLONAL PHARMACEUTICS INC. (hereinafter called "CPI"), a Delaware corporation having an operating office in Dallas, Texas, and BRISTOL-MYERS SQUIBB COMPANY (hereinafter called "BMS"), a Delaware corporation having a principal place of business in Princeton, New Jersey.

W I T N E S S E T H:

WHEREAS, CPI and Research & Development Institute, Inc. (hereinafter called "RDI") entered into a License Agreement dated as of June 10, 1993, which License Agreement is proposed by CPI and BMS to be amended and restated in its entirety pursuant to a certain form of amendment and restatement agreed by the parties (as so amended and restated, hereinafter called the "RDI/CPI LICENSE AGREEMENT");

WHEREAS, Under the RDI/CPI License Agreement CPI licensed from RDI patent and other intellectual property rights relating to a "Taxol Producing Organism System";

WHEREAS, RDI and CPI also entered into a related Research and Development Agreement (such agreement, as may be amended, supplemented and extended from time to time, (the "CPI/RDI RESEARCH AGREEMENT"), which would give rise to patent and other intellectual property rights to be licensed to CPI under the RDI/CPI License Agreement;

WHEREAS, BMS wishes to obtain from CPI an exclusive sublicense to all patent and other intellectual property rights licensed by CPI from RDI under the RDI/CPI License Agreement; and

WHEREAS, CPI is willing to sublicense exclusively such patent and other intellectual property rights to BMS subject to the conditions as set forth herein;

NOW, THEREFORE, for and in consideration of the premises and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, CPI and BMS hereby agree as follows:

I. DEFINITIONS

- A. The term "MICROBIAL DRUG SUBSTANCE PRODUCING SYSTEM" shall mean a system developed by Dr. Gary A. Strobel, Dr. Andrea Stierle and Dr. Donald Stierle of Montana State University and Montana College of Mineral Science and

Technology and/or which otherwise emanates from any of their laboratories comprising:

- (1) Isolation methods for and use of TAXOMYCES ANDREANAE, other fungi and other microorganisms that produce paclitaxel, other taxanes and other chemical compounds which are useful in treating one or more diseases (diseases, as used in this Clause A, include all human diseases and disorders);
- (2) Components derived from the Pacific Yew tree or other sources that produce or effect the production of paclitaxel, other taxanes and other chemical compounds useful for the treatment of one or more diseases; and
- (3) Any and all written material developed by Dr. Gary A. Strobel, Dr. Andrea Stierle and Dr. Donald Stierle disclosing the isolation, characterization and determination of the role of T. BREVIFOLIA leaves and other components useful for the treatment of one or more diseases.

- B. The term "INTELLECTUAL PROPERTY RIGHTS" shall mean all U.S. and Foreign patents or applications for patents owned by RDI, insofar as the claims of such patents or applications cover in whole or in part the Microbial Drug Substance Producing system, including any reissues, renewals, extensions, continuations or continuations-in-part; know-how relating to the Microbial Drug Substance Producing System; and any other intellectual property, including copyrighted works and any trademarks relating to the development and use of the Microbial Drug Substance Producing System, in each case as was licensed by RDI to CPI under the RDI/CPI License Agreement, which include all paclitaxel/taxane-related technology, including, without limitation, all organisms, recombinants, constructs, derivatives and components thereof which produce or affect the production of paclitaxel and other taxanes or any chemical or factor which affects the production level or activity of paclitaxel and other taxanes and any chemical modification and/or production of paclitaxel or other taxanes in treating cancer or any other disease or other commercial uses emanating from the laboratories of Dr. Gary Strobel, Dr. Andrea Stierle and/or Dr. Donald Stierle, and/or produced or developed by, or under the direction/sponsorship of CPI from materials supplied to CPI pursuant to the RDI/CPI License Agreement or the CPI/RDI Research Agreement. The patent applications and patents includable in the Intellectual Property Rights as of date hereof are set forth in Attachment A.
- C. "LICENSED PRODUCTS", as used herein, means any product, apparatus, kit or component part thereof, or any subject matter whose manufacture, sale or use as covered by any Intellectual Property Rights, and any improvements, modifications, or applications thereof as may exist at the execution of the

2

RDI/CPI License Agreement whether or not described in issued patents, and additionally any Novel Taxane from Fermentation, Novel BMS Compound from Fermentation and any compound made using either of them as starting material.

- D. "LICENSED METHOD", as used herein, means any method, procedure, process or any other subject matter whose manufacture, use or sale is covered by any Intellectual Property Rights.
- E. "NET SALES", as used herein, means the gross revenues received by BMS or its sublicensees either for (a) Licensed Products sold or (b) services performed using Licensed Products or Licensed Method less the sum of the following deductions, where applicable: sales, use, tariff, import/export duties or other excise taxes imposed on particular sales; allowances, credits, chargebacks and refunds to non-affiliated third parties because of rejections, returns or price reduction of product; freight costs and insurance charges on shipments to customers included in invoiced amounts; and rebates and price reductions/adjustments required by law, regulations or contract. In the case of rebates and price reductions/adjustments required by contract as referred to in the preceding sentence, the same shall not be deductible to the extent that the contract in question is between affiliates or related companies or the price concessions in question are given in connection with the marketing/sales of other product or products such as in the case of "bundling" of products.
- F. "INVENTIONS", as used herein, shall mean the Licensed Products and the Licensed Method as described above, or any part thereof.
- G. "APPLICABLE ROYALTY RATE", as used herein, shall mean the percentage rate or rates at which BMS shall pay royalties to CPI hereunder, determined on a calendar year-by-calendar year basis, as follows:
- (1) With respect to using the Intellectual Property Rights licensed hereunder to produce (a) paclitaxel to be commercialized as TAXOL-Registered Trademark- or another compound (which is neither a Novel Taxane from Fermentation nor a Novel-BMS Compound from Fermentation) to be used by BMS in commercialization as such without further chemical

transformation into another compound, or (b) baccatin III or a miscellaneous taxane mixture as a starting material for paclitaxel or any other compound (which is neither a Novel Taxane from Fermentation nor a Novel BMS Compound from Fermentation):

3

PORTION OF ANNUAL NET SALES -----	"PAC/DIRECT" -----	"BAC" OR "TT" -----
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]

As used in the foregoing table, the italicized, lower rates in parentheses shall apply with respect to a Licensed Product if (and only if) BMS in respect of the same product is paying a royalty to CPI pursuant to the Sublicense Agreement dated as of May 19, 1998 (the "WSURF-SUBLICENSE AGREEMENT") between CPI and BMS under The Washington State University Research Foundation License Agreement; and the terms "PAC/DIRECT", "BAC" and "TT" are as defined in Clause A(3) in Article III below.

- (2) With respect to (a) using the Intellectual Property Rights licensed hereunder to produce any compound that is a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation or is produced using a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation as a starting material or (b) any Licensed Product that is a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation or, as commercialized by BMS or its sublicensees, is produced using a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation as a starting material but in either case is produced otherwise than using the Intellectual Property Rights:

PORTION OF ANNUAL NET SALES -----	"DIRECT" -----	"INDIRECT" -----
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]

4

As used in the foregoing table:

The italicized, lower rates in parentheses shall apply with respect to a Licensed Product if (and only if) BMS in respect of the same product is paying a royalty to CPI pursuant to the WSURF-Sublicense Agreement.

"DIRECT" refers to where the Intellectual Property Rights are used to produce the Novel Taxane from Fermentation or Novel BMS Compound from Fermentation in question which is used by BMS in commercialization as such without further chemical transformation into a different compound.

"INDIRECT" refers to where (a) the Intellectual Property Rights are used to produce (1) the Novel Taxane from Fermentation or Novel BMS

Compound from Fermentation in question which is subsequently chemically transformed into the product commercialized by BMS or (2) a compound which is subsequently chemically transformed into the product (being the Novel Taxane from Fermentation or Novel BMS Compound from Fermentation in question) commercialized by BMS or (b) the Licensed Product in question is a Novel Taxane from Fermentation or Novel BMS Compound from Fermentation or, as commercialized by BMS, is produced using a Novel Taxane from Fermentation or Novel BMS Compound from Fermentation as a starting material and in either case is produced otherwise than using the Intellectual Property Rights.

"INDIRECT" also refers to where the Licensed Product in question is a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation or, as commercialized by BMS or its sublicensees, is produced using a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation as a starting material but in either case is produced otherwise than using the Intellectual Property Rights.

For the avoidance of doubt, there shall be no stacking of royalties that would otherwise result from Clauses (1) and (2) above both applying to the same product (in any such case, Clause (2) shall control and supersede Clause (1)); and, in each of the two tables above, the amounts under the heading "PORTION OF ANNUAL NET SALES" refer to only the amounts of Net Sales of the particular product in question (for example, only Net Sales of TAXOL-Registered Trademark-containing paclitaxel made by BMS using the Intellectual Property Rights (as a direct fermentation product) are used to determine the Applicable Royalty Rate under the heading "BAC/DIRECT" in Clause (1) above).

- H. "NOVEL TAXANE FROM FERMENTATION", as used herein, shall mean a theretofore unknown taxane discovered by CPI or BMS as a natural product produced by a microorganism in the course of the use of the Intellectual Property Rights.

5

- I. "NOVEL BMS COMPOUND FROM FERMENTATION", as used herein, shall mean a theretofore unknown non-taxane compound discovered by BMS as a natural product produced by a microorganism in the course of the use of the Intellectual Property Rights.

II. LICENSE TERMS

- A. Subject to Clause C below, CPI hereby grants to BMS an exclusive (exclusive even as to CPI) sublicense, under the RDI/CPI License Agreement, to practice the Intellectual Property Rights, including the right to make, have made, sell and use the Inventions throughout the world, including reissues.
- B. CPI also grants to BMS the right further to sublicense to third parties to practice the Intellectual Property Rights so licensed by CPI from RDI, including the right to make, have made, sell and use the Inventions.
- C. CPI may continue to pursue research and development, either on its own or in collaboration with BMS, MSU and/or WSU, but not with any other third party, in the field of microbial fermentation production of paclitaxel and other taxanes. More specifically, CPI shall retain the right to use the Intellectual Property Rights to make paclitaxel and other taxanes solely in pursuit of further research and development with respect to the Intellectual Property Rights and otherwise for non-commercial internal research and development purposes. CPI shall not be entitled to, and shall not, assign or sublicense such right to any third party. For the avoidance of doubt, CPI shall not be entitled to, and shall not, transfer or license and cell line covered by the Intellectual Property Rights to any third party, or otherwise to use the Intellectual Property Rights for the benefit of any third party.

III. PAYMENT

- A. BMS shall pay CPI:

- (1) [] within ten (10) business days following the date hereof;
- (2) [] upon BMS's attainment, using a fungal strain furnished by CPI, of production level of not less than [] of paclitaxel;
- (3) the following amount or amounts, as applicable, depending on the attainable productivity and the actual primary products being pursued by BMS:

6

MILESTONE PAYMENT	PRODUCTIVITY IN MG/1		
	"PAC/DIRECT"	"BAC"	"TT"
[]	[]	[]	[]
[]	[]	[]	[]

As used in the foregoing table:

"PRODUCTIVITY" refers to commercially feasible production, using the Intellectual Property Rights licensed hereunder, of the product or products in question, with fermentation time per production cycle of not more than [].

"PAC/DIRECT" refers to where the primary fermentation product is paclitaxel or another product which is used by BMS in commercialization as such without further chemical transformation into a different compound.

"BAC" refers to where the primary fermentation product is baccatin III used by BMS as a starting material for the final commercial product.

"TT" refers to where the primary fermentation product from using the Intellectual Property Rights is the mixture of miscellaneous taxanes used by BMS as starting materials for the final commercial product.

For the avoidance of doubt: (1) it shall not be implied that BMS is required, or otherwise intends, to pursue more than one of the "PAC/DIRECT", "SAC" and "TT" alternatives; however, the milestone payments in respect of the two different levels of productivity, if attained, are cumulative); (2) each milestone payment shall be payable only once regardless of the number of times the same development milestone has been achieved using different cell lines; and (3) should BMS in fact be pursuing different primary products using a single cell line, the different milestone payments pertaining to such different primary products shall become applicable of productivity, if attained, are cumulative.

- (4) [] upon the U.S. FDA's approval of a Supplemental New Drug Application (hereinafter called "SNDA") for using, or in the case of a product other than TAXOL-Registered Trademark- (which product is not a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation) a New Drug Application (including an Abbreviated New Drug Application, hereinafter called "NDA") that embodies the use of, the Intellectual

7

Property Rights for the commercial production of paclitaxel as the active ingredient in BMS's product TAXOL-Registered Trademark- or such other product;

- (5) [] upon the U.S. FDA's approval of an SNDA for using, or in the case of a product other than TAXOL-Registered

Trademark- (which product is not a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation) an NDA that embodies the use of, the Intellectual Property Rights for commercial production of baccatin III to serve as a starting material for TAXOL-Registered Trademark- or such other product, as the case may be;

Clause (4) above and this Clause (5), together, shall not imply that BMS is required, or otherwise intends, to pursue both alternatives.

- (6) [] upon filing with the U.S. FDA of an Investigational New Drug Application covering a Novel Taxane from Fermentation or a Novel BMS Compound from Fermentation; and
- (7) [] upon the U.S. FDA's approval of a NDA covering a Novel Taxane from Fermentation or Novel BMS Compound from Fermentation.

B. From and after BMS attains a commercially feasible production level of at least [] of paclitaxel using the Intellectual Property Rights, BMS shall pay CPI a minimum royalty of [] per each consecutive 12-month period, which shall be payable within 30 days of the initial attainment of such production level and subsequently within 30 days of each anniversary of such attainment. The minimum royalties paid under this Clause B shall not be refundable, but shall be fully creditable towards current and future earned royalties under Clause C below.

C. BMS shall pay to CPI earned royalties on Net Sales of Licensed Products at the Applicable Royalty Rate.

D. BMS shall pay to CPI royalties at the same Applicable Royalty Rate as provided in Clause B above on Net sales with respect to manufacture, use, or sale of the Inventions by sublicensees.

IV. DUE DILIGENCE

A. As a condition of this sublicense, BMS agrees that it shall use commercially reasonable efforts and diligent endeavor to fully develop and commercially exploit the Intellectual Property Rights licensed hereunder.

8

B. BMS agrees, upon reasonable request by CPI, to apprise CPI and RDI of the current status of the development and regulatory approval of the Intellectual Property Rights for commercial use.

V. BOOKS AND RECORDS

A. BMS shall keep books and records accurately, showing all Licensed Products manufactured, used or sold under the terms of this Agreement. Such books and records shall be open to inspection by a certified public accounting firm appointed by CPI, and reasonably acceptable to BMS, at reasonable times and after reasonable advanced notice for the purpose of verifying the accuracy of the quarterly reports and the royalties due or paid.

B. The fees and expenses of the accounting firm performing such an examination shall be borne by CPI, unless it is determined that royalties or other payments due CPI were underpaid by Five Percent (5%) or more.

VI. TERM; TERMINATION BY PARTIES

A. This Agreement shall take effect as of the date hereof and shall by its term expire as of the later to occur of (1) the tenth (10th) anniversary of the first commercial sale of a Licensed Product or (2) such time as neither the making, use nor sale at the time by BMS of any and all Licensed Products, without giving effect to the sublicense hereunder, would infringe any patent included in the Intellectual Property Right. Following such expiration, BMS shall retain a paid-up, nonexclusive license to the Intellectual Property Rights as otherwise provided in Article II above.

- B. Either party has the right to terminate this Agreement in whole in the event of a material breach of this. Agreement by the other party, by giving notice in writing to such other party setting forth the purported breach and the relief sought. Such termination shall be effective ninety (90) days from such notice if such other party does not cure the default specified. PROVIDED, HOWEVER, BMS shall have thirty (30) days to cure a default in its obligations to make any payment due CPI hereunder.
- C. In addition to the right of termination under Clause B above, BMS shall be entitled at any time, other than during the first six months following the date hereof, to terminate this Agreement in whole by giving notice in writing to CPI. Such termination shall be effective ninety (90) days from the date of such notice.
- D. This Agreement will not terminate automatically if either party shall become bankrupt or insolvent and/or if the business of Licensee shall be placed in the

9

hands of a receiver, assignee, or trustee, whether by voluntary act or otherwise; PROVIDED, HOWEVER, this Agreement is and shall remain, throughout the term hereof, an executory contract which requires full and timely performance of all its terms by BMS in order to prevent it from terminating, bankruptcy or insolvency notwithstanding.

VII. BANKRUPTCY

- A. All rights and licenses granted under or pursuant to this Agreement by CPI and BMS are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code (the "BANKRUPTCY CODE"), an executory contract. The parties hereto agree that BMS, as licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The parties hereto further agree that, in the event that any proceeding shall be instituted by or against CPI as licensor seeking to adjudicate it a bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of it or its debts under any law relating to bankruptcy, insolvency or reorganization relief or debtors, or seeking an entry of an order for relief or the appointment of a receiver, trustee or other similar official for it or any substantial part of its property or it shall take any action to authorize any of the foregoing actions, BMS as licensee shall have the right to retain and enforce its exclusive rights and licenses under this Agreement, including, without limitation, the exclusive right to continue to make, use, manufacture and distribute the Microbial Drug Substance Producing System.

VIII. PROCUREMENT PROGRAM

- A. CPI shall, at its sole cost, diligently prosecute and maintain the United States and foreign patents and patent applications or any necessary intellectual property protection using counsel of its choice and after due consultation with BMS. CPI shall provide BMS with copies of all relevant documentation so that BMS may be informed and apprised of the continuing prosecution and BMS agrees to keep this documentation confidential.
- B. BMS shall pay and or reimburse CPI for all out-of-pocket expenses incurred after the execution of this Agreement in filing, prosecuting and maintaining the Intellectual Property Rights licensed hereunder.
- C. Subject to the rights, if any, of the Government of the United States, as set forth hereinbelow, CPI warrants that it has the lawful right to grant the sublicense under this Agreement.

IX. INFRINGEMENT

A. BMS acknowledges that under the RDI/CPI License Agreement:

"A. In the event that CPI shall learn of the infringement of any patent licensed under [the RDI/CPI License) Agreement, CPI shall call RDI's attention thereto in writing, and shall provide RDI with reasonable evidence of such infringement. RDI and CPI shall jointly use their reasonable efforts to terminate such infringement."

"B. CPI and RDI shall jointly enforce any patent exclusively licensed [under the RDI License Agreement] against infringement by third parties and shall be entitled to first recover their respective costs thereof; and, thereafter, shall share on a negotiated basis the balance of any recovery from such enforcement."

B. Accordingly, CPI and BMS agree that:

- (1) As between BMS and CPI, BMS shall control CPI's dealings with respect to its joint efforts with RDI to end any infringement of any patent licensed under this Agreement.
- (2) As between BMS and CPI, BMS shall control any action taken jointly by CPI and RDI to enforce any patent to BMS hereunder against infringement by third parties and the ensuing negotiation of sharing of any recovery. CPI shall pay over to BMS Seventy-Five Percent (75%) of CPI's share of such recovery.

X. WAIVER

A. It is agreed that no waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent breach or default.

XI. ASSIGNABILITY

A. This Agreement is binding upon and shall inure to the benefit of each party, its successors and assigns; and may not be assigned by either party without the express written consent of the other party, which consent shall not be unreasonably withheld. Any successor or assignee shall be bound by all of the duties and obligations set forth in this Agreement.

11

XII. CONFIDENTIAL INFORMATION

A. BMS and CPI hereby undertake to maintain as secret and confidential all information communicated to one another regarding the Inventions and the Intellectual Property Rights made the subject of this Agreement, with the exception of information:

- (i) Previously known to the recipient;
- (ii) In the public domain; or
- (iii) Which may enter the public domain without the fault or negligence of either party;

provided that BMS can communicate the information on a confidential basis to its sublicensees.

B. BMS and CPI agree to take all reasonable measures to prevent their employees or agents, including employees or agents of their respective licensees or related companies, as well as distributors, sub-distributors, dealers, or official installers, from divulging any secret and confidential information in a manner that may be contrary to the interests of either party. This covenant will extend beyond the term of this Agreement.

XIII. INDEMNIFICATION

- A. Any decision regarding the use and/or safety of the Intellectual Property Rights shall be the sole responsibility of BMS; and as further consideration for the license granted hereunder, BMS shall indemnify and hold. CPI harmless for and against all claims for damages, whether personal or property, resulting from BMS's use of the Intellectual Property Rights and/or other exercise of any rights granted under this Agreement.

XIV. MISCELLANEOUS

- A. In the event that any patent or claim thereof included within the Intellectual Property Rights shall be held invalid in a decision by a Court of competent jurisdiction and no appeal of such decision can or has been taken, all obligation to pay royalties based on such a patent or claim shall cease as of the date of such decisions.

12

- B. No amendment or modification hereof shall be valid or binding upon the parties unless made in writing and signed as aforesaid.
- C. This Agreement embodies the entire understanding of the parties and shall supersede all previous communications, representations or understandings, either oral or written between the parties relating to the subject matter hereof.
- D. In case any one or more provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof, but this Agreement shall be construed as if such invalid or illegal or unenforceable provisions had never been contained herein.

XV. NOTICES

- A. Any payment, notice, or other communication required or permitted to be given to either party hereto shall be deemed to have been properly given and shall be effective on the date of delivery in person on the fourth day after mailing if mailed by first class mail, postage paid, to the respective address given below, or to such other address as it shall designate by written notice given to the other party as follows:

In the case of CPI:

Arthur P. Bollon, Ph.D.
Cytoclonal Pharmaceuticals Inc.
9000 Harry Hines Blvd., Suite 330
Dallas, Texas 75235

In the case of BMS:

Bristol-Myers Squibb Company
Route 206 & Province Line Road
Princeton, New Jersey 08540
Attention: President, Technical Operations

IN WITNESS WHEREOF, parties hereto have caused their duly authorized representatives to execute this Agreement.

CYTOCLONAL PHARMACEUTICS INC.

Dated: May 28, 1998

13

By /s/ ARTHUR P. BOLLON

Arthur P. Bollon, Ph.D.
President and CEO

BRISTOL-MYERS SQUIBB COMPANY

By: /s/ K. ALICE LEUNG

Dated: May 27, 1998

Name: K. Alice Leung
Title: Vice President, Licensing

14

ATTACHMENT A

SUBLICENSE AGREEMENT - CPI AND BMS

U.S. Patent Application, Ser. No. 07/971,508
Patent No. 5,322,779, issued June 21, 1994
"TAXOL PRODUCTION BY TAXOMYCES ANDREANAE (Amended)"
Gary A. Strobel, Andrea Stierle, Donald Stierle
filed November 4, 1992

Australian Patent Application, Ser. No. 41020/93
Patent No. 675,428 issued May 26, 1997
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al filed April 13, 1993

Canadian Patent Application, Ser. No. 2140935
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al filed April 13, 1993

European Patent Application, Ser. No. 93910583.9
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al filed April 13, 1993

Japanese Patent Application, Ser. No. 5-518531
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al Filed April 13, 1993

South Korean Patent Application, Ser. No. 94-703681
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al filed April 13, 1993

PCT Patent Application, Ser. No. PCT/US93/03416
"TAXOL PRODUCTION BY A MICROBE"
Gary A. Strobel et al filed April 13, 1993

[]

[]

[]

[]

15

[]

[]

[]

United States Patent, No. 5,445,809
"Production of Taxol from the Yew Tree"

United States Patent, No. 5,451,392
"Production of Taxol"

SUBLICENSE AGREEMENT
BETWEEN
CYTOCLONAL PHARMACEUTICS INC.
AND
BRISTOL-MYERS SQUIBB COMPANY
UNDER
THE WASHINGTON STATE UNIVERSITY RESEARCH FOUNDATION
LICENSE AGREEMENT

This Agreement, effective as of May 19, 1998, is made by and between Cytoclonal Pharmaceuticals Inc., a corporation duly organized under the laws of Delaware and having its principal office at 9000 Harry Hines Boulevard, Dallas, Texas 75235 (hereinafter "CPI"), and Bristol-Myers Squibb Company, a corporation duly organized under the laws of Delaware and having a principal office at Route 206 and Province Line Road, Princeton, New Jersey 08540 (hereinafter "BMS").

RECITALS

WHEREAS, CPI and The Washington State University Research Foundation (hereinafter "WSURF") entered into a License Agreement effective as of July 8, 1996, which License Agreement is proposed by CPI and BMS to be amended and restated in its entirety pursuant to a certain form of amendment and restatement agreed by the parties (as so amended and restated, hereinafter the "WSURF/CPI License Agreement");

WHEREAS, pursuant to the WSURF/CPI License Agreement, WSURF exclusively licensed to CPI certain rights that WSURF obtained by assignment from Washington State University relating to WSURF Case #307, generally referred to as "Genes for Taxol Biosynthesis" and covered by the "Technology" as defined in the WSURF/CPI License Agreement;

WHEREAS, BMS wishes to obtain from CPI an exclusive sublicense to said "Technology" licensed by CPI from WSURF under the WSURF/CPI License Agreement; and

WHEREAS, CPI is willing to sublicense said "Technology" exclusively to BMS upon the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties agree as follows:

ARTICLE I.

DEFINITIONS

For the purposes of the Agreement, the following words and phrases shall have the following meanings:

1.1 "TECHNOLOGY" shall include all of the following WSURF intellectual property, which is licensed to CPI under the WSURF/CPI License Agreement:

(a) All United States and foreign patents and/or patent applications listed in Appendix A; and

(b) All United States and foreign patents issued or reissued from the patent applications listed in Appendix A (or above) and from any divisional and continuations or continuations-in-part of these applications, or from any subject matter specifically described in these applications.

1.2 "PROSPECTIVE TECHNOLOGY" shall mean any and all prospective patent filings for genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for paclitaxel and other taxanes only, as isolated and characterized in the Washington State University ("WSU") laboratories of Dr. Rodney Croteau; or prospective patent filings owned by WSURF made by others at WSU using materials related to genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathways for paclitaxel and other taxanes only as obtained from

Dr. Rodney Croteau; but not any other paclitaxel-related technology from Dr. Rodney Croteau or Washington State University. A partial list of genes whose sequences are expected to be isolated by Dr. Rodney Croteau is included as Appendix B. For the avoidance of doubt, Prospective Technology under this Agreement shall not include the portion of "Prospective Technology" referred to in Clause (b) in the definition thereof in Paragraph 1.2 of the WSURF/CPI License Agreement.

1.3 "COVERED PRODUCT(S)" shall mean any product which, as commercialized by BMS, is produced using a Covered Cell Line, either:

(a) directly, in which case the compound produced by such Covered Cell Line is used by BMS in commercialization as such without further chemical transformation into a different compound; or

(b) indirectly, in which case the compound produced by such Covered Cell Line is subsequently chemically transformed into the compound (being the Covered Product in question) commercialized by BMS;

2

Accordingly, "DIRECT COVERED PRODUCT(S)" shall mean a Covered Product falling within the description in Clause (a) above; and "INDIRECT COVERED PRODUCT(S)" shall mean a Covered Product falling within the description in Clause (b) above.

Additionally, "COVERED PRODUCT" shall mean any Novel Taxane from Covered Cell Line, Novel BMS Compound from Covered Cell Line or any compound made using any of them as a starting material, in each case even if such compound, as commercialized by BMS, is not produced using any Covered Cell Line.

1.4 "COVERED CELL LINE(S)" shall mean a cell line, be it microbial, plant, mammalian or otherwise, which:

(a) is covered in whole or in part by an issued, unexpired, pending, or prospective claim contained in the Technology in the country in which such cell line is made or used; or

(b) was created using a process which is covered in whole or in part by an issued, unexpired, pending or prospective claim contained in the Technology in the country in which such cell line was made or used.

For the avoidance of doubt, nothing herein shall be construed as conferring upon BMS any right to any cell line that may be created by WSU to the extent that such right has not been licensed to CPI under the WSURF/CPI License Agreement; and Covered Cell Lines shall not include any cell line referred to in Clause (b) in the definition of "Prospective Technology" in Paragraph 1.2 of the WSURF/CPI License Agreement.

1.5 "NET SALES" shall mean the amount billed or invoiced by BMS or its Sublicensees for Covered Product(s) in the Territory less the sum of the following:

(a) sales, use, tariff, import/export duties or other excise taxes imposed on particular sales;

(b) allowances, credits, chargebacks and refunds to non-affiliated third parties because of rejections, returns or price reduction of product;

(c) freight costs and insurance charges on shipments to customers included in invoiced amounts; and

(d) rebates and price reductions/adjustments required by law, regulations or contract.

No deductions shall be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by BMS and on its payroll, or for cost of collections. In the

3

case of rebates and price reductions/adjustments required by contract as referred to in Clause (d) above, the same shall not be deductible to the extent that the contract in question is between affiliates or related companies or the price concessions in question are given in connection with the marketing/sales of other product or products such as in the case of "bundling" of products.

1.6 "BMS" shall include a related company of BMS, the voting stock of which is directly or indirectly at least fifty percent (50%) owned or controlled by BMS, an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of BMS and an organization, the majority ownership of which is directly or indirectly common to the ownership of BMS.

1.7 "FIELD-OF-USE" shall mean for any field-of-use, including but not limited to, research, diagnostic and therapeutic uses of the Technology.

1.8 "TERRITORY" shall mean the world.

1.9 "SUBLICENSER" means any exchange for value, including but not limited to cash, promissory notes, equity, upfront payments, milestone payments, royalties, manufacturing contracts, distribution contracts, sponsored research contracts, partnerships, or joint ventures, received or entered into by BMS with respect to any transfer of any right, whether present, future or contingent, to make, manufacture, use, practice, distribute, or otherwise sell any aspect of the Technology or Covered Products to any third party (hereinafter a "SUBLICENSEE").

1.10 "APPLICABLE ROYALTY RATE" shall mean the percentage rate or rates at which BMS shall pay royalties to CPI hereunder, determined on a calendar year-by-calendar year basis, as follows:

(a) Where the Covered Product in question is (i) paclitaxel to be commercialized as TAXOL-Registered Trademark- or another compound (which is neither a Novel Taxane from Covered Cell Line nor a BMS Compound from Covered Cell Line), in each case as a Direct Covered Product, or (ii) paclitaxel or any other compound (which is neither a Novel Taxane from Covered Cell Line nor a BMS Compound from Covered Cell Line), as an Indirect Covered Product, made from baccatin III or a mixture of miscellaneous taxanes produced by the Covered Cell Line in question:

Portion of Annual Net Sales -----	"Pac/direct" -----	"Bac" or "TT" -----
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]

As used in the foregoing table, the italicized, lower rates in parentheses shall apply with respect to a Covered Product if (and only if) BMS in respect of the same product is paying a royalty to CPI pursuant to the Sublicense Agreement dated as of May 19, 1998 (the "RDI-SUBLICENSER AGREEMENT") between CPI and BMS under the Research & Development Institute, Inc. License Agreement; and the terms "PAC/DIRECT", "BAC" and "TT" are as defined in Clause (b) in Paragraph 3.1 below.

(b) Where the Covered Product in question is a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line or is produced using a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line as a starting material:

Portion of Annual Net Sales -----	"Direct" -----	"Indirect" -----
[]	[]	[]
[]	[]	[]
[]	[]	[]
[]	[]	[]

As used in the foregoing table:

The italicized, lower rates in parentheses. shall apply with respect to a Covered Product if (and only if) BMS in respect of the same product is paying a royalty to CPI pursuant to the RDI-Sublicense Agreement.

"DIRECT" refers to where the Covered Product in question is a Direct Covered Product.

"INDIRECT" refers to where (i) the Covered Product in question is an Indirect Covered Product or (ii) the Covered Product, as commercialized by BMS or its Sublicensees, is produced otherwise than using a Covered Cell Line.

For the avoidance of doubt, there shall be no stacking of royalties that would otherwise result from Clauses (a) and (b) above both applying to the same product (in any such case, Clause (b) shall control and supersede Clause (a); and, in each of the two tables above, the amounts under the heading "Portion of Annual Net Sales" refer to only the amounts of Net Sales of the particular product in question (for example, only Net Sales of TAXOL-Registered Trademark- containing paclitaxel made

by BMS using a Covered Cell Line (as a Direct Covered Product) are used to determine the Applicable Royalty Rate under the heading "Pac/Direct" in Clause (a) above)).

1.11 "NOVEL TAXANE FROM COVERED CELL LINE" shall mean a theretofore unknown taxane discovered by CPI or BMS as a natural product produced by a Covered Cell Line.

1.12 "NOVEL BMS COMPOUND FROM COVERED CELL LINE" shall mean a theretofore unknown non-taxane compound discovered by BMS as a natural product produced by a Covered Cell Line.

ARTICLE II.

GRANT

2.1 Subject to Paragraph 2.5 below, CPI grants to BMS an exclusive (exclusive even as to CPI) sublicense, under the WSURF/CPI License Agreement, to practice the Technology, including to make, have made, use, lease and sell Covered Cell Lines, for the production of Covered Products or otherwise, in the Territory for the Field-of-Use until the expiration or termination of this Agreement. For the avoidance of doubt, no right is granted to BMS hereunder with respect to the portion of the "Prospective Technology" referred to in Clause (b) in the definition thereof in Paragraph 1.2 of the WSURF/CPI License Agreement.

2.2 CPI grants to BMS the right further to Sublicense the sublicense hereunder, including the rights to make, have made, use, lease and sell Covered Cell Lines.

2.3 BMS acknowledges that, under the WSURF/CPI License Agreement, WSURF retains an irrevocable nonexclusive right to permit the use of the Technology by students and employees of WSU exclusively for educational and research purposes to the extent that the retention of this non-exclusive

right is not otherwise inconsistent with rights granted to CPI under Article 15 of the WSURF/CPI License Agreement. The WSURF/CPI License Agreement also provides that: "such right does not include any right, and accordingly WSURF shall not permit [[WSU], to assign or sublicense such right to any third party or to transfer-or license any cell line created using the Technology or any material covered by the Technology to any third party, or otherwise to use the Technology for the benefit of any third party."

2.4 BMS further agrees that it shall, to the extent applicable, abide by all rights and limitations of 35 USC Chapter 38, and implementing regulations thereof, for all patent applications and patents invented in whole or in part with federal money.

2.5 CPI may continue to pursue research and development, either on its own or in collaboration with BMS, MSU and/or WSU, but not with any other third party, in the field of

6

microbial fermentation production of paclitaxel and other taxanes. More specifically, CPI shall retain the right to use the Technology to make paclitaxel and other taxanes solely in pursuit of further research and development with respect to the Technology and otherwise for non-commercial internal research and development purposes. CPI shall not be entitled to, and shall not, assign or sublicense such right to any third party. For the avoidance of doubt, CPI shall not be entitled to, and shall not, transfer or license and cell line created using the Technology or any material covered by the Technology to any third party, nor shall CPI otherwise use the Technology for the benefit of any third party.

2.6 The WSURF/CPI License Agreement provides that:

WSURF grants to [CPI] the Option (hereinafter Option) until July 1, 2006 (hereinafter Option Period) to license any Prospective Technology as this is developed and disclosed from time to time at WSU. [CPI] may exercise this Option during the Option Period by paying the patent costs for any patent filing for the Prospective Technology and executing a confirmatory license, which confirmatory license shall then become an addendum to this Agreement. Upon execution of the confirmatory license, the Prospective Technology shall become a part of the Technology as defined in Section 1.1 of [the WSURF/CPI License] Agreement. The Option Period may be extended upon mutual agreement of the parties.

Accordingly, CPI and BMS agree that, as between BMS and CPI, BMS shall control CPI's dealings with WSURF under the foregoing and that, more specifically, CPI shall, as and if requested by BMS, on behalf of BMS promptly exercise the option referred to therein; provided, however, that:

(a) should BMS not desire that CPI exercise the Option with respect to certain Prospective Technology, CPI shall nevertheless have the right to do so, in which case such Prospective Technology shall, notwithstanding anything else herein, not become a part of the Technology licensed to BMS hereunder; and

(b) this Paragraph 2.6 shall not be construed as conferring upon BMS control over the portion of "Prospective Technology" referred to in Clause (b) in the definition thereof in Paragraph 1.2 of the WSURF/CPI License Agreement.

For the avoidance of doubt, subject to Clauses (a) and (b) in the foregoing proviso, any Prospective Technology so licensed to CPI shall become a part of the Technology sublicensed to BMS under this Agreement.

ARTICLE III.

FEES AND ROYALTIES

7

3.1 For the rights, privileges and license granted hereunder, BMS shall pay fees and royalties to CPI in the manner hereinafter provided to the

end of the term of this Agreement or until the Agreement is terminated:

(a) A sublicense issue fee of [] due and payable within ten (10) business days following the date hereof;

(b) The following milestone payment or payments, as applicable, depending on the attainable productivity and the actual primary products being pursued by BMS:

Milestone Payment	Productivity in mg/l		
	"Pac/Direct"	"Bac"	"TT"
[]	[]	[]	[]
[]	[]	[]	[]

As used in the foregoing table:

Productivity refers to commercially feasible production, using a Covered Cell Line, of (i) the Direct Covered Product in question or (ii) the compound or compounds which are subsequently converted into the Indirect Covered Product in question, with fermentation time per production cycle of not more than [] .

"PAC/DIRECT" refers to where the primary product produced by the Covered Cell Line in question is a Direct Covered Product.

"BAC" refers to where the primary product produced by the Covered Cell Line in question is baccatin III used by BMS as a starting material for the Indirect Covered Product in question.

"TT" refers to where the primary product produced by the Covered Cell Line in question is a mixture of miscellaneous taxanes used by BMS as starting materials for the Indirect Covered Product in question.

For the avoidance of doubt: (1) it shall not be implied that BMS is required, or otherwise intends, to pursue more than one of the "Pac/direct," "Bac" and "TT" alternatives; however, the milestone payments in respect of the two different levels of productivity, if attained, are cumulative); (2) each milestone payment shall be payable only once regardless of the number of times the same development milestone

has been achieved using different cell lines; and (3) should BMS in fact be pursuing different primary products using a single cell line, the different milestone payments pertaining to each such different primary product shall become applicable.

(c) A milestone payment of [] upon the U.S. FDA's approval of a Supplemental New Drug Application (hereinafter called "SNDA") for using, or in the case of a product other than TAXOL-Registered Trademark- (which product is not a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line) a New Drug Application (including an Abbreviated New Drug Application, hereinafter "NDA") that embodies the use of, a Covered Cell Line for the commercial production of paclitaxel as the active ingredient in BMS's product TAXOL-Registered Trademark- or such other product, in each case as a Direct Covered Product;

(d) A milestone payment of [] upon the U.S. FDA's approval of an SNDA for using, or in the case of a product other than TAXOL-Registered Trademark- (which product is not a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line) an NDA that embodies the use of, a Covered Cell Line for the commercial production of baccatin III to serve as a starting material for TAXOL-Registered Trademark- or such other product, as the case may be,

as an Indirect Covered Product;

Clause (c) above and this Clause (d), together, shall not imply that BMS is required, or otherwise intends, to pursue both alternatives.

(e) A milestone payment of [] upon the filing with the U.S. FDA's of an Investigational New Drug Application covering a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line;

(f) A milestone payment of [] upon the U.S. FDA's approval of a NDA covering a Novel Taxane from Covered Cell Line or a Novel BMS Compound from Covered Cell Line; and

(g) Running royalty On Net Sales of Covered Products at the Applicable Royalty Rate; such Royalty shall be due and payable within fifty (50) days of March 31, June 30, September 30 and December 31 for royalties earned during the preceding calendar quarter.

3.2 Royalties on sales in currencies other than U.S. Dollars shall be calculated using the appropriate BMS's customary internal corporate monthly exchange rates for the last month of the calendar quarter in question. For each month and each currency, BMS's customary internal corporate monthly exchange rate shall equal the arithmetic average of the daily exchange rates (obtained as described below) during the period from (i) the 20th day of the preceding month (or, if such 20th day is not a business day, the immediately preceding business day) through (ii) the 19th day of the current month (or, if such 19th day is not a business day, the immediately preceding

9

business day); each daily exchange rate is obtained from the Reuters Daily Rate Report or The Wall Street Journal, Eastern U.S. Edition, or, if not so available, as furnished by BMS's local subsidiaries. Royalties and payments to CPI shall be in U.S. Dollars.

3.3 BMS shall also pay to CPI a running royalty on Net Sales of any and all Covered Products by any and all of BMS's Sublicensees occurring during the term of this Agreement on the same terms and schedule as though the Net Sales by such Sublicensees were made by BMS.

ARTICLE IV.

REPORTS, PAYMENTS AND RECORDS

4.1 BMS shall keep full, true and accurate books of account containing all particulars that may be necessary, and are accessible to a certified public accounting firm appointed by CPI and reasonably satisfactory to BMS, for the purpose of verifying BMS's royalty statement or compliance in other respects with this Agreement.

4.2 Within fifty (50) days after March 31, June 30, September 30 and December 31 of each year, commencing the first commercial sale of a Covered Product, BMS shall deliver to CPI true and accurate royalty statements, giving such particulars relating to the Net Sales of BMS and its Sublicensees during the preceding calendar quarter under this Agreement as shall be reasonably pertinent to a royalty accounting hereunder. Such statements shall include at least the following:

(a) number of Covered Products sold;

(b) deductions applicable as provided in Paragraph 1.4 to determine Net Sales thereof;

(c) total royalties due; and

(d) names and addresses of all Sublicensees, if any, of BMS.

4.3 With each report submitted, BMS shall pay to CPI the royalties due and payable under this Agreement.

4.4 The royalty payments set forth in this Agreement shall, if overdue, bear interest until payment at a per annum rate four percent (4%) above the prime rate in effect in THE WALL STREET JOURNAL on the due date. The payment of such interest shall not foreclose CPI from exercising any other rights it may have as a consequence of the lateness of any payment.

10

ARTICLE V.

DUE DILIGENCE

5.1 BMS shall use commercially reasonable efforts and diligent endeavor to fully develop and commercially exploit the Technology licensed hereunder.

5.2 BMS agrees that Covered Products sold in the United States shall be manufactured substantially in the United States, when, as and if required by 35 USC Section 204.

5.3 BMS agrees, upon reasonable request by CPI, to apprise CPI and WSURF of the current status of the development and regulatory approval of the Technology for commercial use.

ARTICLE VI.

PATENT PROSECUTION

6.1 BMS acknowledges that, under the WSURF/CPI License Agreement:

"WSURF shall apply for, seek prompt issuance of, and maintain during the term of [the WSURF/CPI License] Agreement the patent rights for the Technology and Prospective technology in the United States and the foreign countries listed in Appendix C [thereto]. Appendix C [thereto] may be amended by the verbal agreement of [WSURF and CPI], such agreement to be confirmed in writing within ten (10) days. The prosecution, filing and maintenance of all patents and applications shall be the primary responsibility of WSURF; provided, however, that [CPI] shall have Reasonable Opportunity to advise WSURF and shall cooperate with WSURF in such prosecution, filing and maintenance. Reasonable Opportunity means that WSURF shall provide [CPI] with copies of all correspondence regarding any patent application for the Technology, including but not limited to, any filing, notice, restriction requirement, office action, response to office action, request for terminal disclaimer, and request for reissue or reexamination of any patent or patent application under the Technology."

Accordingly, CPI and BMS agree that, as between BMS and CPI, BMS shall control CPI's dealings with WSURF under the foregoing and that CPI shall promptly forward to BMS copies of any and all documents and other materials that it receives from WSURF pursuant thereto.

6.2 BMS agrees to reimburse CPI for its payment of all reasonable fees and costs relating to the filing, prosecution and maintenance of patents included in the Technology, to the extent that such fees and costs are incurred after the date of this Agreement.

11

6.3 The WSURF/CPI License Agreement provides that:

"WSURF shall employ its best efforts not to allow any of the Technology under which BMS is licensed, and for which [CPI] is underwriting the filing, prosecution and maintenance costs thereof, to lapse or become abandoned without [CPI]'s authorization and/or reasonable notice to [CPI]. WSURF shall notify [CPI] sixty (60) days prior to any proposed intentional abandonment of any rights in any territory. Within thirty (30) days after receipt of the notice [CPI] shall, in writing, either (a) concur with abandonment or (b) elect to resume responsibility for the prosecution and maintenance of all the Technology that WSURF proposes to abandon."

Accordingly, CPI and BMS agree that, as between CPI and BMS, BMS shall control CPI's dealings with WSURF pursuant to the foregoing and, in particular, CPI shall promptly copy BMS on any notice received from WSURF thereunder and defer to BMS all decisions pertaining thereto.

ARTICLE VII.

INFRINGEMENT

7.1 BMS shall inform CPI promptly in writing of any alleged infringement or declaratory judgment action alleging invalidity or non-infringement of patents sublicensed under this Agreement by third parties and provide any evidence thereof.

7.2 The WSURF/CPI License Agreement provides that:

"During the term of [the WSURF/CPI License] Agreement, [CPI] shall have the first right, but shall not be obligated, to prosecute at its own expense and with attorneys of its choice, all infringements of patents licensed under [the WSURF/CPI License] Agreement. For such purposes, WSURF agrees to be joined as party plaintiff. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the consent of WSURF, which consent shall not be unreasonably withheld. [CPI] shall indemnify WSURF against any order for costs or damages that may be made against WSURF in such proceedings."

Accordingly, CPI and BMS agree that, as between CPI and BMS, BMS shall control CPI's dealings with WSURF pursuant to the foregoing and, in particular, BMS shall be permitted, in place of CPI, to pursue any and all infringement actions and other proceedings against third parties.

7.3 The WSURF/CPI License Agreement provides that:

12

"In the event that [CPI] shall undertake the enforcement and/or defense of the patents by litigation, [CPI] may withhold up to fifty percent (50%) of the royalties otherwise thereafter due WSURF [under the WSURF/CPI License Agreement] and apply the same toward reimbursement of up to half of [CPI]'s expenses, including reasonable attorneys' fees in connection therewith. Any recovery of damages by [CPI] for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of [CPI] relating to the suit, and next toward reimbursement of WSURF for any royalties past due or withheld and applied pursuant to . . . Article VII [of the WSURF/CPI License Agreement]. The balance remaining from any such recovery shall be divided equally between [CPI] and WSURF."

Accordingly, CPI and BMS agree that, as between CPI and BMS, BMS shall control CPI's dealings with WSURF pursuant to the foregoing and, in particular, BMS shall be entitled, in place of CPI, to undertake the enforcement and/or defense of the patents by litigation; in any such case, BMS may withhold up to fifty percent (50%) of the royalties otherwise thereafter due CPI hereunder and apply the same toward reimbursement of up to half of BMS's expenses, including reasonable attorneys' fees in connection therewith; any recovery of damages by BMS for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of BMS relating to the suit, and next toward reimbursement of CPI for any royalties past due or withheld and applied pursuant to this Article VII. Fifty percent (50%) of the balance remaining from any such recovery shall be paid over to WSURF as required by the WSURF/CPI License Agreement, the remaining fifty percent (50%) shall be divided between BMS (75%) and CPI (25%).

7.4 BMS acknowledges that, as provided in the WSURF/CPI License Agreement:

"In the event that a [declaratory] judgment action alleging invalidity or noninfringement of Patents shall be brought against [CPI] or [CPI] chooses not to prosecute an infringement action, WSURF shall, at its option, have the right, within thirty (30) days after commencement of such action or notification by [CPI], to intervene and

take over the sole defense of the action at its own expense. Any recovery of damages by WSURF for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of WSURF relating to the suit, and next toward reimbursement of [CPI] for any direct legal fees and reasonable expenses relating to the suit. The balance remaining from any such recovery shall be retained solely by WSURF."

7.5 In any infringement suit that either party may institute to enforce the Patents pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.

7.6 BMS acknowledges that, as provided in the WSURF/CPI, License Agreement:

13

"Regardless of which party is controlling the infringement suit, during the period of the [WSURF/CPI License] Agreement, CPI shall have the sole right (to the exclusion of WSURF) in accordance with the terms and conditions [t]herein to sublicense any alleged infringer for future use of the Patents."

As between CPI and BMS, however, CPI shall have no right, and BMS alone shall have sole right (to the exclusion of CPI), to sublicense any part of the Technology to any third party infringer.

ARTICLE VIII.

PRODUCT LIABILITY

8.1 BMS shall at all times during the term of this Agreement and thereafter, indemnify, defend and hold harmless CPI and CPI's directors, officers and employees against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death of or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever resulting from the production, manufacture, sale, use, lease, consumption or advertisement of the Licensed Products made or sold by BMS or its Sublicensee and/or BMS or its Sublicensee's practice of Licensed Processes.

8.2 BMS shall obtain and carry in full force and effect liability insurance which shall protect BMS and CPI in regard to events covered by Paragraph 8.1 above.

8.3 EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT OR IN THE LETTER AGREEMENT DATED MAY 19, 1998 BETWEEN WSURF, CPI AND BMS, CPI MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND VALIDITY OF PATENT RIGHT CLAIMS, ISSUER OR PENDING.

ARTICLE IX.

EXPORT CONTROLS

It is understood that CPI is subject to the United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979), and that the obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written

14

assurances by BMS that BMS shall not export data or commodities to certain foreign countries without prior approval of such agency. CPI makes no representation that a license shall not be required or that, if required, it shall be issued.

ARTICLE X.

USE OF NAMES AND SYMBOLS

BMS shall not use the names of the Washington State University, Washington State University Research Foundation, nor of any of its employees, nor any adaptation or symbol thereof, in any advertising promotional or sales literature without prior written permission from WSURF in each case.

ARTICLE XI.

ASSIGNMENTS

Neither party may sell, assign or transfer this Agreement except with prior written permission of the other party.

ARTICLE XII.

TERM AND TERMINATION

12.1 This Agreement shall be in full force and effect from the date hereof until the later to occur of (a) the tenth (10th) anniversary of the first commercial sale of a Covered Product or (b) the latest to expire of the patents licensed under the Technology. Following the expiration if this Agreement as aforesaid, BMS shall retain a paid-up, non-exclusive license, with the right to grant sublicenses, to the Technology as otherwise provided in Article II above.

12.2 If BMS shall cease to carry on its business for any reason, this Agreement shall terminate immediately upon written notice by CPI.

12.3 BMS may terminate this Agreement at any time, other than during the first six months following the date hereof, by providing written notice to CPI ninety (90) days prior to the effective date of termination selected by BMS and upon payment of all amounts due hereunder including interest due CPI through the effective date of the termination.

12.4 CPI may terminate this Agreement by ninety (90) days written notice if BMS:

15

(a) Is in forty-five (45) days default in payment of fees and/or royalties; or

(b) Is in breach of this Agreement in any material respect; or

(c) Provides any materially false report; or

(d) Institutes bankruptcy, insolvency, liquidation or receivership proceeding or proceedings for reorganization under bankruptcy law or has a petition for bankruptcy filed against it or makes a general assignment for the benefit of creditors; and

BMS fails to remedy any such default, breach or false report within forty-five (45) days after written notice by CPI.

12.5 Upon termination of this Agreement for any reason, nothing herein shall be construed as releasing either party from any obligation that matured prior to the effective date of such termination. BMS and any Sublicensee thereof may, however, after the effective date of such termination, sell all Covered Products, including Covered Products to be derived from work in process at the time of such termination, provided that BMS shall pay to CPI the royalties thereon as required by this Agreement and shall submit the reports required on such sales of Covered Products.

12.6 Surviving any termination are:

- (a) BMS's obligation to pay any royalties and fees accrued or accruable;
- (b) Any cause of action or claim of BMS or CPI, accrued or to accrue, because of any breach or default by the other party.
- (c) The provisions of Articles IV, VII, VIII, IX and X.

ARTICLE XIII.

PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

Any payment, notice or other communication pursuant to the Agreement shall be sufficiently made or given on the date of mailing if sent to such party by certified first class mail, postage prepaid, addressed to the other party as below:

If to BMS: Bristol-Myers Squibb Company
Route 206 and Province Line Road
Princeton, NJ 08540

16

Attention: President, Technical Operations

If to CPI: Cytoclonal Pharmaceuticals Inc.
9000 Harry Hines Boulevard
Dallas, TX 75235
Attention: President

ARTICLE XIV.

SUBLICENSING

BMS shall provide to CPI written notification of any Sublicense it may grant under Paragraph 2.2. BMS agrees to provide such written notification indicating the effective date of execution and effective term, within thirty (30) days of execution of such Sublicense.

ARTICLE XV.

CONFIDENTIALITY

15.1 Except to the extent expressly authorized in this Agreement, BMS and CPI agree that, for the term of this Agreement and for five (5) years thereafter, the receiving party of materials marked confidential by the providing party, shall keep those materials completely confidential and shall not publish or otherwise disclose such information and shall not use it except to the extent that it can be established by the receiving party by competent proof that such information:

- (a) Is now or hereafter becomes public knowledge through no fault of the other party;
- (b) Was in the receiving party's possession prior to the date of this Agreement;
- (c) Was received from a third party source independent of and without obligation to the sending party.

15.2 Each party may disclose the other's information to the extent such disclosure is reasonably necessary in filing and prosecuting patent applications, prosecuting or defending litigation, complying with applicable governmental regulations or conducting clinical trials.

17

15.3 If materials are transferred to any third party which relate

to any genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for paclitaxel [or other taxanes] as isolated and characterized in the Washington State University laboratories of Dr. Rodney Croteau or using related materials from his laboratory, and the related materials are not otherwise covered by patent filings, BMS shall obtain a valid and executed materials transfer agreement before transferring the materials to the third party.

15.4 The freedom of Washington State University faculty members to publish shall not be inhibited by BMS. However, in order to protect any material of a proprietary nature, CPI shall promptly forward to BMS with a copy of any proposed publication relating to the Technology for that it receives from WSURF as contemplated in the WSURF/CPI License Agreement. BMS understands that CPI will have forty-five (45) days to request a delay of the publication in question. BMS agrees to provide CPI with an explanation for any request to delay and shall give its reasons for such delay in writing not later than the end of such fortyfive (45) day review period. As between CPI and BMS, CPI agrees that BMS shall control in all matters relating to proposed publications of Washington State University faculty members.

ARTICLE XVI.

MISCELLANEOUS

16.1 None of the terms, covenants and conditions of this Agreement may be waived except by the written consent of the party waiving compliance.

16.2 This Agreement shall be construed, interpreted and applied in accordance with the laws of the State of Washington.

16.3 The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

16.4 All Covered Products shipped to or sold in any country in the Territory shall be marked in such manner as to conform with the patent laws and practice of the country of manufacture or sale.

16.5 The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

This Agreement, together with the Master License Agreement dated as of the date hereof between CPI and BMS and the letter agreement dated as of the date hereof among CPI, BMS

and WSURF, embodies the entire understanding between the parties and shall supersede all previous communications, representations, or understandings, either oral or written, relating to the subject matter hereof.

IN WITNESS WHEREOF, the parties have duly executed this Agreement the day and year set forth below:

CYTOCLONAL PHARMACEUTICS INC.

BRISTOL-MEYERS SQUIBB COMPANY

By: /s/ ARTHUR P. BOLLON

By: /s/ ROSLYN FEDER

Name: Arthur P. Bollon

Name: Roslyn Feder, M.D. Ph.D.

Title: President and CEO

Title: Senior VP, External Development

Date: May 19, 1998

Date: May 19, 1998

APPENDIX A:
CURRENT PATENTS AND PATENT APPLICATIONS

- 1) []
- 2) []
- 3) []
- 4) []

APPENDIX B:
GENES FOR ENZYMES WHICH ARE EXPECTED TO BE THE SUBJECT OF FUTURE PATENT FILINGS

- 1) []
- 2) []
- 3) []

AMENDED AND RESTATED LICENSE AGREEMENT

BETWEEN

THE WASHINGTON STATE UNIVERSITY RESEARCH FOUNDATION

AND

CYTOCLONAL PHARMACEUTICS INC.

This Amended and Restated License Agreement, effective the date of the last signature, is made by and between the Washington State University Research Foundation, a non-profit corporation duly organized and existing under the laws of the State of Washington and having its principal office at NE 1615 Eastgate Boulevard, Pullman, Washington 99163 (hereinafter WSURF), and Cytoclonal Pharmaceuticals Inc., a corporation duly organized under the laws of Delaware and having its principal office at 9000 Harry Hines Boulevard, Dallas, TX 75235 (hereinafter LICENSEE).

RECITALS

WHEREAS, WSURF is the owner of certain rights by assignment from Washington State University relating to WSURF Case #307, generally referred to as "Genes for Taxol Biosynthesis" and covered by "the Technology" as defined below; and

WHEREAS, LICENSEE acknowledges that the United States Government has certain right in this invention under 37 CFR Section 401 including a non-exclusive, nontransferable, paid-up license heretofore granted by the WSURF, and

WHEREAS, WSURF wishes to have these rights utilized in the public interest and is willing to grant a license thereunder; and

WHEREAS, LICENSEE wishes to obtain certain rights from WSURF upon the terms and conditions set forth herein for the commercial development, use and sale of the Technology so that public utilization shall result, and

WHEREAS, WSURF and LICENSEE entered into the original License Agreement effective as of July 8, 1996 (hereinafter the "Original License Agreement"), and

WHEREAS, said original License Agreement has been amended in the meantime and further amendment is deemed desirable by the parties, and

WHEREAS, for the purpose of consolidating all such amendments, the parties hereby restate said License Agreement, as amended to date, in its entirety (as so amended and restated, hereinafter "this Agreement").

NOW, THEREFORE, in consideration of the premises and the mutual covenant contained herein, the parties agree as follows:

ARTICLE I
DEFINITIONS

For the purposes of the Agreement, the following words and phrases shall have the following meanings:

1.1 "The Technology" shall include all of the following WSURF intellectual property:

(a) All United States and foreign patents and/or patent applications listed in Appendix A; and

(b) All United States and foreign patents issued or reissued from the patent applications listed in Appendix A (or above) and from any divisional and continuations or continuations-in-part of these applications, or from any subject matter specifically described in these applications.

1.2 "Prospective Technology" shall mean (a) any and all prospective patent filings for genes for enzymes and the associated gene products, including the

enzymes, in the biosynthetic pathway for paclitaxel and other taxanes only, as isolated and characterized in the Washington State University laboratories of Dr. Rodney Croteau; or prospective patent filings owned by WSURF made by others at WSU using materials related to genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathways for paclitaxel and other taxanes only as obtained from Dr. Rodney Croteau, and (b) any and all prospective patent filings relating to suspension cell cultures from the genus *Taxus*, or suspension cell cultures from other genera, which produce paclitaxel or other taxanes, as developed in the WSU laboratories of Dr. Rodney Croteau; but not any other paclitaxel-related technology from Dr. Rodney Croteau or Washington State University. A partial list of genes whose sequences are expected to be isolated by Dr. Rodney Croteau is included as Appendix B.

1.3 "Covered Product(s)" shall mean any product which, as commercialized by LICENSEE or its SUBLICENSEE, is produced using a Covered Cell Line, either:

(a) directly, in which case the compound produced by such Covered Cell Line is used by LICENSEE or its SUBLICENSEE, as the case may be, in commercialization as such without further chemical transformation into a different compound; or

2

(b) indirectly, in which case the compound produced by such Covered Cell Line is subsequently chemically transformed into the compound (being the Covered Product in question) commercialized by LICENSEE or its SUBLICENSEE, as the case may be.

1.4 "Covered Cell Line(s)" shall mean a cell line, be it microbial, plant, mammalian or otherwise, which:

(a) is covered in whole or in part by an issued, unexpired, pending, or prospective claim contained in the Technology in the country in which such cell line is made or used; or

(b) was created using a process which is covered in whole or in part by an issued, unexpired, pending or prospective claim contained in the Technology in the country in which such cell line was made or used.

1.5 "Net Sales" shall mean the amount billed or invoiced by LICENSEE for Covered Product(s) in the Territory less the sum of the following:

(a) sales, use, tariff, import/export duties or other excise taxes imposed on particular sales;

(b) allowances, credits, chargebacks and refunds to non-affiliated third parties because of rejections, returns or price reduction of product;

(c) freight costs and insurance charges on shipments to customers included in invoiced amounts; and

(d) rebates and price reductions/adjustments required by law, regulations or contract.

No deductions shall be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by LICENSEE and on its payroll, or for cost of collections. In the case of rebates and price reductions/adjustments required by contract as referred to in Clause (d) above, the same shall not be deductible to the extent that the contract in question is between affiliates or related companies or the price concessions in question are given in connection with the marketing/sales of other product or products such as in the case of "bundling" of products.

1.6 "LICENSEE" shall include a related company of LICENSEE, the voting stock of which is directly or indirectly at least fifty percent (50%) owned or controlled by LICENSEE, an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of LICENSEE and an organization, the majority ownership of which is directly or indirectly common to the ownership of LICENSEE.

3

1.7 "Field-of-Use" shall mean for any field-of-use, including but not limited to, research, diagnostic and therapeutic uses of the Technology.

1.8 "Territory" shall mean the world.

1.9 "Sublicense" means any exchange for value, including but not limited to cash, promissory notes, equity, up-front payments, milestone payments, royalties, manufacturing contracts, distribution contracts, sponsored research contracts, partnerships, or joint ventures, received or entered into by LICENSEE with respect to any transfer of any right, whether present, future or contingent, to make, manufacture, use, practice, distribute, or otherwise sell any aspect of the Technology or Covered Products to any third party (hereinafter SUBLICENSEE), except that Sublicense fees shall not include bona-fide payments by a SUBLICENSEE that represent the reimbursement of research fees paid to third parties or other documented development costs. LICENSEE shall provide to WSURF documentation of a such research expenses with copies of each sublicense agreement and shall negotiate in good faith with WSURF for a fair allocation of consideration in any such hybrid agreement.

ARTICLE II GRANT

2.1 WSURF grants to LICENSEE the exclusive right and license to practice the Technology and to make, have made, use, lease and sell Covered Cell Lines, for the production of Covered Products or otherwise, in the Territory for the Field-of-Use until the expiration or termination of this Agreement.

2.2 WSURF grants to LICENSEE the right to Sublicense rights to practice the Technology and to make, have made, use, lease and sell Covered Products under provisions provided below.

2.3 WSURF grants to LICENSEE the Option (hereinafter Option) until July 1, 2006 (hereinafter Option Period) to license any Prospective Technology as this is developed and disclosed from time to time at WSU. LICENSEE may exercise this Option during the Option Period by paying the patent costs for any patent filing for the Prospective Technology and executing a confirmatory license, which confirmatory license shall then become an addendum to this Agreement. Upon execution of the confirmatory license, the Prospective Technology shall become a part of the Technology as defined in Section 1.1 of this Agreement. The Option Period may be extended upon mutual agreement of the parties.

2.4 WSURF retains an irrevocable nonexclusive right to permit the use of the Technology by students and employees of Washington State University exclusively for educational and research purposes to the extent that the retention of this non-exclusive right is not otherwise inconsistent with rights granted to LICENSEE under this Agreement. For the avoidance of doubt, such right does not include any right, and accordingly WSURF shall not permit Washington State University, to assign

4

or sublicense such right to any third party or to transfer or license any cell line created using the Technology or any material covered by the Technology to any third party, or otherwise to use the Technology for the benefit of any third party. For the further avoidance of doubt, Dr. Croteau and Washington State University shall be able to transfer materials relating to the Technology for educational and research, but not commercial, purposes in accord with Section 15.3 of this Agreement. In each such instance WSURF shall obtain the prior permission of LICENSEE, and its permitted Sublicensees, which permission shall not be unreasonably withheld.

ARTICLE III FEES AND ROYALTIES

3.1 For the rights, privileges and license granted hereunder, LICENSEE shall pay fees and royalties to WSURF in the manner hereinafter provided to the end of the term of this Agreement or until the Agreement is terminated:

(a) License Issue Fees of [], and past Patent Costs of [],

which Fee and Costs were paid to WSURF following the execution of the Original License Agreement. LICENSEE has also granted WSURF 36,000 warrants to purchase LICENSEE's common stock at the price of [] per share, such warrants to be exercisable in 12,000 share lots on each the third, fourth and fifth anniversary of the Effective Date of the Original Agreement. LICENSEE agrees that any shares obtained under said warrants shall be included under equal terms for registration in any registration statement filed by LICENSEE and shall be included on equal terms in any stock split or other changes to LICENSEE'S capital structure.

(b) An Annual Minimum Royalty of [] per year due and payable on July 1, 1999, an Annual Minimum Royalty of [] per year due and payable on July 1, 2000, an Annual Minimum Royalty of [] per year due and payable on July 1, 2001 and on July 1 of each year thereafter during the exclusive period of this Agreement: provided that each year's Running Royalties under subpart (c) below and/or consideration for a Sublicense under subpart (d) received by WSURF shall be credited to the extent paid against LICENSEE's requirement to pay the Annual Minimum Royalty otherwise due for that fiscal year during the exclusive period of this Agreement.

(c) With respect to sales by LICENSEE of each Covered Product, Running Royalty in an amount equal to [] of such Covered Product for each gene incorporated into the Covered Cell Line that was used to produce such Covered Product as commercialized, except that such Running Royalty on account of all genes shall not exceed [] of the Net Sales of the Covered Product in question. Such Royalty shall be due and payable within sixty (60) days of June 30 and December 31 for royalties earned the preceding six (6) month period, together with, in the case of each Covered Product that, as commercialized, is being produced using a Covered Cell Line covered by patent rights referred to in Clause (b) in the definition of "Prospective Technology" in Paragraph 1.2, an additional running royalty in an amount equal to [].

5

(d) With respect to Sublicenses, [] of any sublicense issue fees, milestone payments, sublicense maintenance fees, sublicense royalties or any other consideration including equity and interests in strategic partnerships received for the grant of a Sublicense in accordance with Paragraph 2.2. LICENSEE may make any commercially reasonable proposal regarding form of payment of the WSURF share of these Sublicense issue fees, which proposal may include equity, warrants or other forms of payment at LICENSEE'S sole discretion, and WSURF'S consent to any commercially, reasonable proposal made by LICENSEE shall not be unreasonably withheld.

(i) Should it become necessary to license the rights of Montana State University, or those of its assignee in interest the Research & Development Institute, with regards to the fungal production system to produce Covered Products the percentage otherwise due to WSURF under subpart (d) above shall be further reduced to [] of any consideration received by Licensee in connection with the issue or maintenance of any Sublicense.

(e) LICENSEE may make a commercially reasonable proposal regarding reduction of Sublicense royalty percentages based upon a showing of commercial impracticability of the above rates, and WSURF may, at its sole discretion and upon its express written approval, reduce the royalty rate charged under any given Sublicense.

3.2 Royalties on sales in currencies other than U.S. Dollars shall be calculated using the appropriate foreign exchange rate for such currency quoted by the Wall Street Journal, on the close of business on the last banking day of each calendar half year. Royalties and payments to WSURF shall be in U.S. Dollars.

ARTICLE IV REPORTS, PAYMENTS AND RECORDS

4.1 LICENSEE shall keep full, true and accurate books of account containing all particulars that may be necessary for WSURF or its agents for the purpose of verifying LICENSEE's royalty statement or compliance in other respects with this Agreement.

4.2 Within sixty (60) days after June 30 and December 31 of each year, LICENSEE shall deliver to WSURF true and accurate reports, giving such particulars of the business conducted by LICENSEE and its SUBLICENSEES during the preceding six (6) month period under this Agreement as shall be pertinent to a royalty accounting hereunder. Such reports shall include at least the following:

(a) number of Covered Products manufactured and sold;

6

(b) deductions applicable as provided in Paragraph 1.4 to determine Net Sales thereof;

(c) total royalties due;

(d) names and addresses of all SUBLICENSEES of LICENSEE;

(e) status of agency approvals for new Covered Products; and

(f) plans for increased sales or introduction of new Covered Products.

4.3 With each report submitted, LICENSEE shall pay to WSURF the royalties due and payable under this Agreement. If no royalties are due, LICENSEE shall so report.

4.4 On or before the ninetieth (90th) day following the close of LICENSEE's fiscal year, LICENSEE shall provide WSURF with LICENSEE'S certified financial statements for the preceding fiscal year including, at a minimum, a Balance Sheet and Operating Expense Statement.

4.5 The royalty payments set forth in this Agreement shall, if overdue, bear interest until payment at a per annum rate of four percent (4%) above the prime rate in effect in the Wall Street Journal on the due date. The payment of such interest shall not foreclose WSURF from exercising any other rights it may have as a consequence of the lateness of any payment.

ARTICLE V DUE DILIGENCE

5.1 LICENSEE shall use, or cause a SUBLICENSEE to use, commercially reasonable efforts and diligent endeavor, to fully develop and commercially exploit the Technology licensed hereunder.

5.2 LICENSEE agrees that Covered Products sold in the United States shall be manufactured substantially in the United States, when, as and if required by 35 USC Section 204.

5.3 LICENSEE agrees, upon reasonable request by WSURF, to apprise WSURF of the current status of the development and regulatory approval of the Technology for commercial use.

ARTICLE VI PATENT PROSECUTION

6.1 WSURF shall apply for, seek prompt issuance of, and maintain during the term of this Agreement the patent rights for the Technology and Prospective technology in the United States and the foreign countries listed in Appendix C. Appendix C may be amended by the verbal agreement of both parties, such agreement to be confirmed in writing within ten (10) days. The

7

prosecution, filing and maintenance of all patents and applications shall be the primary responsibility of WSURF; provided, however, that LICENSEE shall have Reasonable Opportunity to advise WSURF and shall cooperate with WSURF in such prosecution, filing and maintenance. Reasonable Opportunity means that

WSURF shall provide LICENSEE with copies of all correspondence regarding any patent application for the Technology, including but not limited to, any filing, notice, restriction requirement, office action, response to office action, request for terminal disclaimer, and request for reissue or reexamination of any patent or patent application under the Technology.

6.2 Payment of all fees and costs relating to the filing, prosecution and maintenance of patents shall be the responsibility of LICENSEE, whether such fees and costs were incurred before or after the Effective Date of this Agreement. Payment of all fees and costs relating to the filing, prosecution and maintenance of patents shall be made promptly and in no case later than thirty (30) days from date of invoice.

6.3 WSURF shall employ its best efforts not to allow any of the Technology under which LICENSEE is licensed, and for which LICENSEE is underwriting the filing, prosecution and maintenance costs thereof, to lapse or become abandoned without LICENSEE'S authorization and/or reasonable notice to LICENSEE. WSURF shall notify LICENSEE sixty (60) days prior to any proposed intentional abandonment of any rights in any territory. Within thirty (30) days after receipt of the notice LICENSEE shall, in writing, either (a) concur with abandonment or (b) elect to resume responsibility for the prosecution and maintenance of all the Technology that WSURF proposes to abandon.

ARTICLE VII INFRINGEMENT

7.1 LICENSEE shall inform WSURF promptly in writing of any alleged infringement or declaratory judgment action alleging invalidity or non-infringement of patents licensed under this Agreement by third parties and provide any evidence thereof.

7.2 During the term of this Agreement, LICENSEE shall have the first right, but shall not be obligated, to prosecute at its own expense and with attorneys of its choice, all infringements of patents licensed under this Agreement. For such purposes, WSURF agrees to be joined as party plaintiff. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the consent of WSURF, which consent shall not be unreasonably withheld. LICENSEE shall indemnify WSURF against any order for costs or damages that may be made against WSURF in such proceedings.

7.3 In the event that LICENSEE shall undertake the enforcement and/or defense of the patents by litigation, LICENSEE may withhold up to fifty percent (50%) of the royalties otherwise thereafter due WSURF hereunder and apply the same toward reimbursement of up to half of LICENSEE'S expenses, including reasonable attorneys' fees in connection therewith. Any recovery of damages by LICENSEE for any such suit shall be applied first in satisfaction of any unreimbursed

8

expenses and legal fees of LICENSEE relating to the suit, and next toward reimbursement of WSURF for any royalties past due or withheld and applied pursuant to this Article VII. The balance remaining from any such recovery shall be divided equally between LICENSEE and WSURF.

7.4 In the event that a declaratory judgment action alleging invalidity or noninfringement of Patents shall be brought against LICENSEE or LICENSEE chooses not to prosecute an infringement action, WSURF shall, at its option, have the right, within thirty (30) days after commencement of such action or notification by LICENSEE, to intervene and take over the sole defense of the action at its own expense. Any recovery of damages by WSURF for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of WSURF relating to the suit, and next toward reimbursement of LICENSEE for any direct legal fees and reasonable expenses relating to the suit. The balance remaining from any such recovery shall be retained solely by WSURF.

7.5 In any infringement suit that either party may institute to enforce the Patents pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.

7.6 Regardless of which party is controlling the infringement suit, during the period of this Agreement, CPI shall have the sole right (to the exclusion of WSURF) in accordance with the terms and conditions herein to sublicense any alleged infringer for future use of the Patents.

ARTICLE VIII
PRODUCT LIABILITY

8.1 LICENSEE shall at all times during the term of this Agreement and thereafter, indemnify, defend and hold harmless WSURF's trustees, officers, employees and affiliates against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death of or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever resulting from the production, manufacture, sale, use, lease, consumption or advertisement of the Licensed Products and/or Licensed Processes or arising from any obligation of LICENSEE hereunder.

8.2 LICENSEE shall obtain and carry in full force and effect liability insurance which shall protect LICENSEE and WSURF in regard to events covered by Paragraph 8.1 above.

8.3 EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, WSURF MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND VALIDITY OF PATENT RIGHT CLAIMS, ISSUED OR PENDING.

9

ARTICLE IX
EXPORT CONTROLS

It is understood that WSURF is subject to the United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended, and the Export Administration Act of 1979), and that the obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE shall not export data or commodities to certain foreign countries without prior approval of such agency. WSURF neither represents that a license shall not be required nor that, if required, it shall be issued.

ARTICLE X
USE OF NAMES AND SYMBOLS

LICENSEE shall not use the names of the Washington State University, Washington State University Research Foundation, nor of any of its employees, nor any adaptation or symbol thereof, in any advertising promotional or sales literature without prior written permission from WSURF in each case, except that LICENSEE may state that it is licensed by WSURF under one or more agreements.

ARTICLE XI
ASSIGNMENTS

LICENSEE may not sell, assign or transfer this Agreement except with prior written permission of WSURF, which consent shall not be unreasonably withheld.

ARTICLE XII
TERM AND TERMINATION

12.1 This Agreement shall be in full force and effect from the Effective Date of the Original License Agreement until the later to occur of (a) the tenth (10th) anniversary of the first commercial sale of a Covered Product or (b) the latest to expire of the patents licensed under the Technology. Following the expiration if this Agreement as aforesaid, Licensee shall retain a paid up, non-exclusive license, with the right to grant sublicenses, to the Technology as otherwise provided in Article 11 above.

12.2 If LICENSEE shall cease to carry on its business for any reason, this

Agreement shall terminate immediately upon written notice by WSURF.

10

12.3 LICENSEE may terminate this Agreement by providing written notice to WSURF ninety (90) days prior to the effective date of termination selected by LICENSEE and upon payment of all amounts including interest due WSURF through the effective date of the termination.

12.4 WSURF may terminate this Agreement by ninety (90) days written notice if LICENSEE:

- (a) Is in forty-five (45) days default in payment of fees and/or royalties or providing of reports; or,
- (b) Is in breach of any provision hereof, or,
- (c) Provides any materially false report; or
- (d) Institutes bankruptcy, insolvency, liquidation or receivership proceeding or proceedings for reorganization under bankruptcy law or has a petition for bankruptcy filed against it or makes a general assignment for the benefit of creditors; and

LICENSEE fails to remedy any such default, breach, or false report within forty-five (45) days after written notice by WSURF.

12.5 Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. LICENSEE and any SUBLICENSEE thereof may, however, after the effective date of such termination, sell all Covered Products, provided that LICENSEE shall pay to WSURF the royalties thereon as required by this Agreement and shall submit the reports required on such sales of Covered Products.

12.6 Upon termination of this Agreement for any reason, any SUBLICENSEE not then in default shall have the right to seek a license from WSURF.

12.7 Surviving any termination are:

- (a) LICENSEE'S obligation to pay any royalties and fees accrued or accruable;
- (b) Any cause of action or claim of LICENSEE or WSURF, accrued or to accrue, because of any breach or default by the other party; and
- (c) The provisions of Articles IV, VII VIII and IX.

ARTICLE XIII
PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

11

Any payment, notice or other communication pursuant to the Agreement shall be sufficiently made or given on the date of mailing if sent to such party by certified first class mail, postage prepaid, addressed to the other party as below:

If to WSURF:	Washington State University Research Foundation NE 1615 Eastgate Boulevard Pullman, WA 99163 Attn: President
If to LICENSEE:	Cytoclonal Pharmaceuticals Inc. 9000 Harry Hines Boulevard Dallas, TX 75235 Attn: President

ARTICLE XIV
SUBLICENSING

LICENSEE shall provide to WSURF written notification of any Sublicense it may grant under Paragraph 2.2. LICENSEE agrees to provide such written notification indicating the effective date of execution, effective term and up-front payments, within thirty (30) days of execution of such Sublicense.

ARTICLE XV
CONFIDENTIALITY

15.1 Except to the extent expressly authorized in this Agreement, LICENSEE and WSURF agree that, for the term of this Agreement and for five (5) years thereafter, the receiving party of materials marked confidential by the providing party, shall keep those materials completely confidential and shall not publish or otherwise disclose such information and shall not use it except to the extent that it can be established by the receiving party by competent proof that such information:

- (a) Is now or hereafter becomes public knowledge through no fault of the other party;
- (b) Was in the receiving party's possession prior to Effective Date;
- (c) Was received from a third party source independent of and without obligation to the sending party.

12

15.2 Each party may disclose the other's information to the extent such disclosure is reasonably necessary in filing and prosecuting patent applications, prosecuting or defending litigation, complying with applicable governmental regulations or conducting clinical trials.

15.3 If materials are transferred to any third party which relate to any genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for paclitaxel, as isolated and characterized in the Washington State University laboratories of Dr. Rodney Croteau or using related materials from his laboratory, and the related materials are not otherwise covered by patent filings, WSURF shall obtain a valid and executed materials transfer agreement before transferring the materials to the third party.

15.4 The freedom of Washington State University faculty members to publish shall not be inhibited by LICENSEE. However, in order to protect any material of a proprietary nature, WSURF shall provide LICENSEE with a copy of any proposed publication relating to the Technology for at least forty-five (45) days prior to submission for publication. At Washington State University's discretion, the proposed publication may be delayed for forty-five (45) days beyond the end of LICENSEE's forty-five (45) day review period, with possible extensions at the discretion of Washington State University. LICENSEE agrees to provide WSURF with an explanation for any request to delay and shall give its reasons for such delay in writing not later than the end of its forty-five (45) day review period.

ARTICLE XVI
MISCELLANEOUS

16.1 None of the terms, covenants and conditions of this Agreement may be waived except by the written consent of the party waiving compliance.

16.2 This Agreement shall be construed, interpreted and applied in accordance with the laws of the State of Washington.

16.3 The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

16.4 All Licensed Products shipped to or sold in other countries shall be marked in such manner as to conform with the patent laws and practice of the

country of manufacture or sale.

16.5 The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

This Agreement embodies the entire understanding between the parties and shall supersede all previous communications, representations, or understandings, either oral or written, relating to the subject matter hereof,

IN WITNESS WHEREOF, the parties have duly executed this Agreement the day and year set forth below:

THE WASHINGTON STATE UNIVERSITY
RESEARCH FOUNDATION

CYTOCLONAL PHARMACEUTICS INC.

By: /s/ KEN SPITZER

By: /s/ ARTHUR P. BOLLON

Name: Ken Spitzer

Name: Arthur P. Bollon, Ph.D.

Title: Corporate Secretary

Title: President and CEO

Date: June 3, 1998

Date: May 19, 1998

APPENDIX A: CURRENT PATENTS AND PATENT APPLICATIONS

- 1) []
- 2) []
- 3) []
- 4) []

APPENDIX B: GENES FOR ENZYMES WHICH ARE EXPECTED TO BE THE SUBJECT OF FUTURE PATENT FILINGS (1)

- 1) []
- 2) []
- 3) []

(1) To be updated.

APPENDIX C: COUNTRIES AGREED UPON IN WHICH CURRENT AND FUTURE PATENTS AND PATENT APPLICATIONS WILL BE DILIGENTLY PURSUED UNDER THIS AGREEMENT

United States

European Patent Office

Japan

Canada

Mexico

South Africa

Australia

AMENDMENT TO LICENSE AGREEMENT

This Amendment to that certain License Agreement dated June 10, 1993, by and between THE RESEARCH AND DEVELOPMENT INSTITUTE, INC. ("RDI") and CYTOCLONAL PHARMACEUTICS INC. ("CPI") as previously amended, is entered into this 27th day of May, 1998.

W I T N E S S E T H :

WHEREAS, RDI has been designated the licensing agency for MONTANA STATE UNIVERSITY-BOZEMAN (hereinafter "UNIVERSITY") technologies; and,

WHEREAS, on June 10, 1993 RDI and CPI entered into a License Agreement whereby RDI granted an exclusive license to CPI to taxol and other technologies (hereinafter "Technology") developed at UNIVERSITY and MONTANA TECH OF THE UNIVERSITY OF MONTANA (hereinafter "MONTANA TECH"); and

WHEREAS, the parties are desirous of clarifying their intent with regard to the payment of royalties and other payments due RDI under the aforesaid License Agreement.

NOW, THEREFORE, in consideration of the premises, the parties agree as follows:

1. Paragraph III C. is hereby amended to add a subsection (5) which shall read in its entirety as follows:

(5) Any and all minimum royalties shall be credited against royalties earned or other payment due to RDI pursuant to subparagraphs D, E, F and/or H of this Section III and any such payment pursuant to sub-paragraphs D, E, F and/or H of this Section III shall be credited against the minimum royalties provided for in this subparagraph C.

2. Paragraph III D. is hereby amended in its entirety to read as follows:

D. CPI shall pay to RDI an amount earned royalty of [] on CPI's Net Sales for Licensed Products if covered by an issued patent, the payment thereof to be paid quarterly within thirty (30) days of the close thereof.

3. Paragraph III E. is hereby amended in its entirety to read as follows:

E. CPI shall pay to RDI an amount earned royalty of [] on CPI's Net Sales for Licensed Products not covered by an issued patent or patent pending claim, but covered by or incorporating know-how or trade secrets relating to the Taxol Producing Organism System, the payment thereof to be paid quarterly within thirty (30) days of the closed thereof, provided, however, should it be the reasonable opinion of patent counsel that the Licensed Products under this Paragraph E are subject to patentable claims, but the parties agree to treat said inventions as trade secrets, the royalty rate shall then be [] on Nets Sales.

4. Paragraph III F. is hereby amended to read as follows:

F. CPI shall pay to RDI [] of all royalties received with respect to manufacture, use, or sale of the inventions by sublicensees, which royalty shall be reduced to [] in the event CPI is required to pay royalties to others, the payment thereof to be made within thirty (30) days of CPI's receipt thereof.

5. A new Paragraph III H. is hereby added to read in its entirety as follows:

CPI shall pay RDI all up-front, milestone and royalty payments it may receive from Bristol-Myers Squibb Company

("BMS") pursuant to Section I and III of that certain
SUBLICENSE AGREEMENT UNDER RESEARCH & DEVELOPMENT INSTITUTE,
INC. LICENSE AGREEMENT between CPI and BMS. The aforesaid
payments shall be in the amount of the full share of
payments due RDI under the license agreement as amended
pursuant to paragraph 4 above.

IN WITNESS WHEREOF, the parties have entered into this Addendum to License
Agreement on the 27th day of May, 1998.

2

THE RESEARCH AND DEVELOPMENT INSTITUTE, INC.

By: /s/ ROGER BLAIR

Title: President

CYTOCLONAL PHARMACEUTICS INC.

By: /s/ ARTHUR P. BOLLON

Title: President and CEO

3