

11-08-2002



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RECORDATION FORM COVER SHEET

OFFICE OF PUBLIC RECORDS TRADEMARKS ONLY

FORM PTO-1594 (Modified) (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)

U.S. DEP. of Patents

2002 NOV -4 AM 10:16

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Genentix Pharmaceuticals Inc.

11-4-02

- Individual(s)
General Partnership
[X] Corporation - State: Delaware
Other

- Association
Change of Name

Additional name(s) of conveying party(ies) attached? [ ] Yes [X] No

3. Nature of conveyance:

- [X] Collateral Assignment
[ ] Security Agreement
[ ] Other
[ ] Merger
[ ] Change of Name

Execution Date: September 19, 2002

2. Name and address of receiving party(ies)

Name: Johnson & Johnson Development Corporation

Internal Address:

Street Address:

One Johnson & Johnson Plaza
New Brunswick, New Jersey 08933

- Association
General Partnership
Limited Partnership
[X] Corporation - State: New Jersey
Other

If assignee is not domiciled in the United States, a domestic designation is attached. [ ] Yes [X] No (Designations must be a separate document form)

Additional name(s) & addresses(es) attached? [ ] Yes [X] No

4. Application number(s) or registration number(s):

A. Trademark Application No.(s)

B. Trademark Registration No.(s)

75/370328 78/130500
75/370403 78/130503
75/372070 78/139935
75/575131 78/141231

Additional numbers attached? [ ] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: A. Jason Mirabito
Address: MINTZ, LEVIN, COHN, FERRIS GLOVSKY and POPEO, P.C. One Financial Center Boston, MA 02111

6. Total number of applications and trademarks involved: [ 8 ]

7. Total fee (37 CFR 3.41).....\$215.00

[X] Enclosed

[ ] Should the amount of the enclosed fee be insufficient, the Commissioner is hereby authorized to charge the balance due to the deposit account of the undersigned.

8. Deposit Account No: 50-0311, Ref. 24844-001

11/07/2002 BYRNE 00000215 75370328

DO NOT USE THIS SPACE

01 FC:8521 40.00 00
02 FC:8522 175.00 00

9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

A. Jason Mirabito

[Handwritten Signature]

November 4, 2002

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: [ 10 ]

Mail to: Box ASSIGNMENT
Commissioner of Patents and Trademarks
Washington, D.C. 20231

## COLLATERAL ASSIGNMENT OF PATENTS, TRADEMARKS AND COPYRIGHTS

THIS COLLATERAL ASSIGNMENT OF PATENTS, TRADEMARKS AND COPYRIGHTS (hereinafter referred to as the "Agreement"), is dated as of September 19, 2002, by and between GENETIX PHARMACEUTICALS INC., a Delaware corporation with a principal place of business located at 840 Memorial Drive, Cambridge, MA 02139 (hereinafter referred to as the "Company"), and JOHNSON & JOHNSON DEVELOPMENT CORPORATION, a New Jersey corporation with a principal place of business located at One Johnson & Johnson Plaza, New Brunswick, NJ 08933 (hereinafter referred to as the "Secured Party").

1. Definitions. The following terms, as used herein, shall have the respective meanings set forth below:

"Copyrights" means all copyrights, whether now existing or hereafter acquired, all registrations thereof, and all applications in connection therewith, including, without limitation, those described in Annex I hereto, and all reissues, extensions or renewals thereof

"Copyright License" means any agreement now or hereafter in existence providing for the grant by or to the Company of any right to exercise any Copyright, including, without limitation, the agreements described in Annex I hereto.

"Copyright Office" means the United States Copyright Office.

"Patent and Trademark Office" means the United States Office of Patents and Trademarks.

"Patent License" means all agreements, whether written or oral, providing for the grant by or to the Company of any right to manufacture, use or sell any invention covered by a Patent, including, without limitation, any thereof referred to in Annex I hereto.

"Patents" means all patents, patent applications and patent applications in preparation (including each patent, patent application and patent application in preparation described on Annex I hereto), including without limitation, the inventions and improvements described therein, together with the reissues, divisions, continuations, renewals, extensions, and continuations in part thereof

"Secured Obligations" means all debts and liabilities of the Company to Secured Party as evidenced by the Consolidated Secured Note and, if issued, the Additional Secured Notes (each as defined in that certain Securities Purchase and Exchange Agreement (the "Securities Purchase Agreement") of even date herewith by and between the Company and the Secured Party).

"Trademark License" means any agreement now or hereafter in existence providing for the grant by or to the Company of any right to use any Trademark, including, without limitation, the agreements described in Annex I hereof.

“Trademarks” means all registered and unregistered domestic and foreign trademarks, trademark applications, trade names service marks, trade dress and corporate names including, without limitation, the trademarks, trademark applications and trade names described in Annex I hereto and all reissues, extensions or renewals thereto.

2. Collateral Assignment. As collateral security for the prompt and complete payment and performance of all the Secured Obligations, together with any and all expenses which may be incurred by the Secured Party in collecting any or all of such Secured Obligations or enforcing any rights, obligations or liabilities under this Agreement, the Company hereby collaterally assigns to the Secured Party all of the Company’s right, title and interest in, to and under the following, whether presently existing or hereafter arising or acquired (collectively, the “Collateral”):

(a) all Copyrights;

(b) all Copyright Licenses;

(c) all proceeds and products of each Copyright and Copyright License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Copyright or Copyright License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (a) through (c), collectively the “Copyright Collateral”);

(d) all Patents;

(e) all Patent Licenses;

(f) all proceeds and products of each Patent and Patent License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Patent or Patent License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (d) through (f), collectively the “Patent Collateral”);

(g) all Trademarks;

(h) all Trademark Licenses;

(i) all proceeds and products of each Trademark and Trademark License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Trademark or Trademark License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (g) through (i), collectively the “Trademark Collateral”);

(j) causes of action, claims and warranties now or hereafter owned or acquired

by the Company in respect of any of the items listed above; and

- (k) all proceeds of any of the Collateral described in clauses (a) through (k).

Notwithstanding the foregoing provisions of this Section 2, such collateral assignment and grant of security interest shall not extend to, and the term "Collateral" shall not include, any of the foregoing which are now or hereafter held by the Company to the extent that (i) the same are not assignable or capable of being encumbered as a matter of law or under the terms of any agreement applicable thereto (except to the extent that such restriction does not impair the creation of a security interest under the UCC) without the consent of the other applicable party thereto and (ii) such consent has not been obtained; provided, however, that such grant of security interest shall extend to, and the term "Collateral" shall include (A) any and all proceeds of the foregoing to the extent that the assignment or encumbering of such proceeds is not so restricted and (B) upon any other applicable party's consent being obtained with respect to any of the foregoing that is otherwise excluded, thereafter the same as well as any and all proceeds thereof that might have theretofore been excluded from such grant of a security interest shall be included within the term "Collateral." Notwithstanding anything in this Agreement to the contrary, at any time prior to the occurrence of an Event of Default, subject to the Secured Party's consent, the Company shall have the right to grant to third parties licenses or sublicenses of any Proprietary Rights in which the Company has any right, title or interest.

3. Representations and Warranties. As an inducement to the Secured Party to enter into this Agreement, the Company makes the following representations and warranties:

(a) Annex I sets forth a complete and correct list of all Copyrights, Copyright Licenses, Patents, Patent Licenses, Trademarks and Trademark Licenses in which the Company has any right, title or interest.

(b) Except as disclosed in Schedule 3, the Company is the sole beneficial owner of the Collateral, free and clear of any liens, encumbrances, security interests, charges, or claims, except for the collateral assignment and security interest in favor of the Secured Party provided for herein, and the Company agrees that it will not grant any security interest, lien or encumbrance in the Collateral without prior written consent of the Secured Party.

(c) Except pursuant to Copyright Licenses, Patent Licenses and Trademark Licenses and entered into by the Company in the ordinary course of business, which are listed in Annex I, the Company owns and possesses the right to use, and has done nothing to authorize or enable any other person or entity to use, the Copyrights, Patents and Trademarks listed on Annex I, and all registrations listed on Annex I are valid and in full force and effect.

(d) Except as disclosed on Schedule 3, to the best of the Company's knowledge (i) there is no violation by others of any right of the Company with respect to any Copyright, Patent or Trademark listed on Annex I, (ii) the Company is not infringing in any respect upon any Copyright, Patent or Trademark of any other person or entity,

and (iii) no proceedings have been instituted or are pending against the Company, or to the Company's knowledge, threatened, alleging any such violation.

The Company agrees that it will at its expense and at the Secured Party's request, (i) defend the Collateral (subject to its reasonable business judgment) from any and all claims and demands of any other person or entity and (ii) that it will not grant, create or permit to exist any lien or encumbrance upon the Collateral in favor of any other person or entity, except to the extent existing on the date hereof. The Company hereby agrees to pay, indemnify, and hold the Secured Party harmless from and against any and all other liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses of disbursements of any kind or nature whatsoever ("Claims") with respect to the Collateral, including, without limitation, Claims of patent infringement, except for Claims made by the Secured Party or any Affiliate thereof, as such term is defined in the Securities Act of 1933, as amended, or Claims arising out of the negligence or willful conduct of the Secured Party.

4. Continued Use of the Copyrights, Patents and Trademarks. During the term of this Agreement, the Company shall utilize and employ the Copyrights, Patents and Trademarks listed on Annex I hereto in the same or similar manner as it has in the past, and shall employ the appropriate notice of such Copyrights and Patents in connection with the works for which such Copyrights, Patents and Trademarks were granted. The Company agrees to use its best ability to maintain the registration of the Copyrights, Patents and Trademarks listed on Annex I hereto in full force and effect by taking any action which it believes necessary in its reasonable business judgment, through attorneys of its choice, all at its expense. In the event that any of the Copyrights, Patents or Trademark is infringed by a third party, so as to have a material adverse effect on the Collateral or the Secured Party's rights with respect thereto, or if such infringement gives rise to litigation or to the filing of a claim or notice of opposition with the Copyright Office or the Patent and Trademark Office, as applicable, the Company shall promptly notify the Secured Party. Any damages recovered from the infringing party (less attorney's fees and court costs) shall be deemed to be part of the Collateral. The Company shall not assign this Agreement or any rights in the Copyright Collateral, Patent Collateral or the Trademark Collateral or the material protected thereby without the prior written approval of the Secured Party and such attempted assignment shall be void ab initio.

5. Continuing Liability. The Company hereby expressly agrees that, anything herein to the contrary notwithstanding, it shall remain liable under each license, interest and obligation assigned to the Secured Party hereunder to observe and perform all the conditions and obligations to be observed and performed by the Company thereunder, all in accordance with and pursuant to the terms and provisions thereof. The Secured Party shall not have any obligation or liability under any such license, interest or obligation by reason of or arising out of this Agreement or the collateral assignment thereof to the Secured Party or the receipt by the Secured Party of any payment relating to any such license, interest or obligation pursuant hereto, nor shall the Secured Party be required or obligated in any manner to perform or fulfill any of the obligations of the Company thereunder or pursuant thereto, or to make any payment, or to make any inquiry as to the nature or the sufficiency of any payment received by it or the sufficiency of any performance by any party under any such license, interest or obligation, or to present or file any claim, or to take any action to collect or enforce any performance or the payment of any amounts which may have been assigned to it or to which it may be entitled at time or times.

6. New Copyrights and Patents. If the Company shall (a) obtain rights to any new Copyrights or (b) obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension, or continuation-in-part of any Patent listed on Annex I or any improvement on any such Patent, or (c) become entitled to the benefit of any Trademark which benefit is not in existence on the date hereof or become aware of any existing Trademark of which the Company has not previously informed the Secured Party, the Company shall give to the Secured Party prompt notice thereof in writing hereof, and shall execute and deliver, and cause to be filed with the Copyright Office or the Patent and Trademark Office, as applicable, a modification of this Agreement amending Annex I hereto to include such new Copyright, Patent or Trademark thereon. Notwithstanding the foregoing) the Company hereby irrevocably appoints the Secured Party its true and lawful attorney (such appointment coupled with an interest), with full power of substitution, to execute an amendment of this Agreement on behalf of the Company amending Annex I hereto to include such new Copyright, Patent or Trademark.

7. Default. In the event (a) any representation of the Company set forth herein or in the Securities Purchase Agreement shall have not been true and correct in all material respects when made; (b) the Company shall fail to observe or perform any of its obligations, undertakings, or responsibilities hereunder for more than five (5) days after the date on which such observation or performance is required after written notice from the Secured Party to the Company; or (c) a default shall occur under the Consolidated Secured Note or an Additional Note, an event of default shall, without notice or demand, occur hereunder (each of the foregoing, an "Event of Default").

8. Remedies. (a) If an Event of Default has occurred, the Secured Party may exercise, in addition to all other rights and remedies granted to it in this Agreement and all documents, instruments, and agreements executed in connection therewith, all rights and remedies of a secured party under the Uniform Commercial Code. Without limiting the generality of the foregoing, the Company expressly agrees that in any such event the Secured Party, without demand of performance or other demand, advertisement or notice of any kind (except to such extent as notice may be required by applicable law with respect to the time or place of any public or private sale) to or upon the Company or any other person or entity (all and each of which demands, advertisements and/or notices are hereby expressly waived), may forthwith collect, receive, appropriate and realize upon the Collateral, or any part thereof, and/or may forthwith sell, lease, license, assign, give an option or options to purchase, or sell or otherwise dispose of and deliver said Collateral (or contract to do so), or any part thereof, in one or more parcels at public or private sale or sales, at any exchange, broker's board or at any of the Secured Party's offices or elsewhere at such prices as it may deem best, for cash or on credit or for future delivery without assumption of any credit risk. The Secured Party shall have the right upon any such public sale or sales, and, to the extent permitted by law, upon any such private sale or sales, to purchase the whole or any part of the Collateral so sold, free of any right or equity of redemption in the Company, which right or equity is hereby expressly waived and released. To the extent permitted by applicable law, the Company waives all claims, damages and demands against the Secured Party arising out of the repossession, retention or sale of the Collateral. Notwithstanding anything in this Agreement to the contrary, the Secured Party acknowledges and agrees that, in exercising its Remedies hereunder, (i) the Collateral may not be

sold, leased, licensed or otherwise disposed of except in a commercially reasonable manner as provided in Section 9-610 of the Uniform Commercial Code ("UCC"), (ii) the Collateral may not be sold, leased, licensed or otherwise disposed of privately to the Secured Party or an "affiliate" thereof, as such term is defined in the Securities Act of 1933, as amended, except in accordance with Section 9-610(c)(2) of the UCC if the collateral is of a kind that is customarily sold on a recognized market or the subject of widely distributed standard price quotations, and (iii) any consent by the Company or decision not to object to the Secured Party's acceptance of the Collateral in full or partial satisfaction of the obligations pursuant to Section 9-620 of the UCC will be subject to approval by a majority of the Company's stockholders (other than the Secured Party and any affiliate thereof), or their designees on the Board of Directors of the Company if the stockholder has such designee.

(b) Without limiting the generality of the foregoing, if an Event of Default has occurred,

(i) the Secured Party may license, or sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any Copyrights, Patents or Trademark included in the Collateral throughout the world for such term or terms, on such conditions and in such manner as the Secured Party shall in its sole discretion determine, the proceeds of such license or sublicense to be applied to the payment of the Secured Obligations;

(ii) the Secured Party may (without assuming any obligations or liability thereunder), at any time and from time to time, enforce (and shall have the exclusive right to enforce) against any licensee or sublicensee all rights and remedies of the Company in, to and under any Copyright Licenses, Patent Licenses or Trademark Licenses and take or refrain from taking any action under any thereof, and the Company hereby releases the Secured Party from, and agrees to hold the Secured Party free and harmless from and against, any claims arising out of any lawful action so taken or omitted to be taken with respect thereto other than any claims arising by reason of the Secured Party's (or affiliate's) own gross negligence or willful misconduct; and

(iii) upon request by the Secured Party, the Company will execute and deliver to the Secured Party a power of attorney, in form and substance satisfactory to the Secured Party, for the implementation of any lease, assignment, license, sublicense, grant of option, sale or other disposition of a Copyright, a Patent or a Trademark.

9. Grant of License to Use Intangibles. For the purpose of enabling the Secured Party to exercise rights and remedies under Section 8 hereof at such time as the Secured Party, without regard to this Section 9, shall be lawfully entitled to exercise such rights and remedies and for no other purpose, the Company hereby grants to the Secured Party an irrevocable, non-exclusive license (exercisable without payment of royalty or other compensation to the Company) to use, assign, license or sublicense any of the Collateral, whether now owned or hereafter acquired by the Company, and wherever the same be located, including in such license reasonable access to all media in which any of the licensed items may be recorded or stored and to all computer programs used for the compilation or printout thereof.

10. Power of Attorney. The Company hereby irrevocably appoints the Secured Party its true and lawful attorney (such appointment coupled with an interest), with full power of substitution, in the name of the Company, the Secured Party, or otherwise, for the sole use and benefit of the Secured Party, but at the Company's expense, to exercise (to the extent permitted by law), at any time and from time to time after an Event of Default has occurred until all of the Secured Obligations have been satisfied in full, all or any of the following powers with respect to all or any of the Collateral:

(a) to demand, sue for, collect, receive and give acquittance for any and all monies due or to become due thereon or by virtue thereof;

(b) to settle, compromise, compound, prosecute or defend any action or proceeding with respect thereto;

(c) to sell, transfer, assign or otherwise deal in or with the same or the proceeds or avails thereof, as fully and effectually as if the Secured Party were the absolute owner thereof; and

(d) to extend the time of payment of any or all thereof and to make any allowance and other adjustments with reference thereto.

11. Severability. If any provision of this Agreement is prohibited or unenforceable in any jurisdiction, such provision shall not invalidate the remaining provisions hereof, and any such prohibition or enforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

12. Termination. This Agreement and the security interest shall terminate when all of the Secured Obligations have been paid in full, at which time the Secured Party shall execute and deliver to the Company, at the Company's expense, all termination statements and similar documents (including, but not limited to, any termination statements or other documents to be filed with or submitted to the United States Patent and Trademark Office) which the Company shall reasonably request to evidence such termination and release of the Collateral hereunder.

13. No Waiver Cumulative Remedies. The Secured Party shall not, by any act, delay, omission or otherwise be deemed to have waived any of its rights or remedies hereunder, and no waiver shall be valid unless in writing, signed by the Secured Party, and then only to the extent therein set forth. A waiver by the Secured Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which the Secured Party would otherwise have had on any other occasion. No failure to exercise nor any delay in exercising on the part of the Secured Party any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies hereunder provided are cumulative and may be exercised singly or concurrently, and are not exclusive of any rights and remedies provided by law.

14. Waivers; Amendments. None of the terms and provisions of this Agreement may be waived, altered, modified or amended except by an instrument in writing executed by the



parties hereto.

15. Limitation by Law. All rights, remedies and powers provided herein may be exercised only to the extent that the exercise thereof does not violate any applicable provision of law, and all the provisions hereof are intended to be subject to all applicable mandatory provisions of law which may be controlling and to be limited to the extent necessary so that they will not render this Agreement invalid, unenforceable in whole or in part or not entitled to be recorded, registered, or filed under the provisions of any applicable law.


16. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and shall inure to the benefit of the Secured Party and its successors and assigns, and nothing herein or in any document, instrument, or agreement executed in connection therewith is intended or shall be construed to give any other person any right, remedy or claim under, to or in respect thereof

17. APPLICABLE LAW. THIS AGREEMENT SHALL BE GOVERNED BY, AND BE CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF DELAWARE AND THE UNITED STATES OF AMERICA.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered as of the date first set forth above.

Genetix Pharmaceuticals Inc.

Johnson & Johnson Development Corporation

By:   
Title: President & CEO

By: \_\_\_\_\_  
Title: \_\_\_\_\_

13. No Waiver Cumulative Remedies. The Secured Party shall not, by any act, delay, omission or otherwise be deemed to have waived any of its rights or remedies hereunder, and no waiver shall be valid unless in writing, signed by the Secured Party, and then only to the extent therein set forth. A waiver by the Secured Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which the Secured Party would otherwise have had on any other occasion. No failure to exercise nor any delay in exercising on the part of the Secured Party any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies hereunder provided are cumulative and may be exercised singly or concurrently, and are not exclusive of any rights and remedies provided by law.

14. Waivers; Amendments. None of the terms and provisions of this Agreement may be waived, altered, modified or amended except by an instrument in writing executed by the parties hereto.

15. Limitation by Law. All rights, remedies and powers provided herein may be exercised only to the extent that the exercise thereof does not violate any applicable provision of law, and all the provisions hereof are intended to be subject to all applicable mandatory provisions of law which may be controlling and to be limited to the extent necessary so that they will not render this Agreement invalid, unenforceable in whole or in part or not entitled to be recorded, registered, or filed under the provisions of any applicable law.

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Genetix Pharmaceuticals Inc.

Johnson & Johnson Development Corporation

By: \_\_\_\_\_

By:  \_\_\_\_\_

Title: \_\_\_\_\_

Title:  \_\_\_\_\_

## Annex I

### Licensed from the Dana Farber Cancer Institute per an agreement:

US 5,665,577 and foreign counterparts

US 5,982,276 and foreign counterparts

### Licensed from Columbia University per an agreement:

US 6,372,502 and foreign counterparts

### Licensed from Theratechnologies per an agreement:

US 5,861,161 and foreign counterparts

### Licensed from MIT per an agreement:

US 5,928,914 and foreign counterparts

US 5,631,162 and foreign counterparts

US 5,861,488 and foreign counterparts

US 6,051,402 and foreign counterparts

### Licensed from MIT and cross-licensed to Cobra Therapeutics per separate agreements:

US 5,126,260 and foreign counterparts

### Cross-licensed from Cobra Therapeutics per the above agreement:

US 5,532,143 and foreign counterparts

### Owned by the Company:

US 6,365,150 and foreign counterparts

“Novel self-inactivating (SIN) retroviral vectors” (application) **10/137,788**

“Novel lentiviral packaging cells” (application) **60/085,283**

“Method of treating arthritis using lentiviral vectors in gene therapy” (application) **60/284,736**

“Method for inhibiting angiogenesis” (application) **60/350,005**

“Methods and compositions for transforming cells” (application) **08/664,084**

“Methods and compositions for transforming cells” (application) **09/293,303**

LentiGlobin™

CardioGF™

LentiPak™

GenPak™

StemShield™

### Owned by the Company and subject to a license option agreement with Cordis Corporation:

“Methods and compositions for promoting angiogenesis” (application) **60/264,457**

“Methods and compositions for promoting angiogenesis using monocytes” (application) **09/860,657**

“Methods and compositions for promoting angiogenesis using polyethylene glycol (PEG) copolymers” (application) **09/860,831**

COPY

**COLLATERAL ASSIGNMENT OF PATENTS, TRADEMARKS AND COPYRIGHTS**

THIS COLLATERAL ASSIGNMENT OF PATENTS, TRADEMARKS AND COPYRIGHTS (hereinafter referred to as the "Agreement"), is dated as of September 19, 2002, by and between GENETIX PHARMACEUTICALS INC., a Delaware corporation with a principal place of business located at 840 Memorial Drive, Cambridge, MA 02139 (hereinafter referred to as the "Company"), and JOHNSON & JOHNSON DEVELOPMENT CORPORATION, a New Jersey corporation with a principal place of business located at One Johnson & Johnson Plaza, New Brunswick, NJ 08933 (hereinafter referred to as the "Secured Party").

1. Definitions. The following terms, as used herein, shall have the respective meanings set forth below:

"Copyrights" means all copyrights, whether now existing or hereafter acquired, all registrations thereof, and all applications in connection therewith, including, without limitation, those described in Annex I hereto, and all reissues, extensions or renewals thereof

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"Patents" means all patents, patent applications and patent applications in preparation (including each patent, patent application and patent application in preparation described on Annex I hereto), including without limitation, the inventions and improvements described therein, together with the reissues, divisions, continuations, renewals, extensions, and continuations in part thereof

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**“Trademarks”** means all registered and unregistered domestic and foreign trademarks, trademark applications, trade names service marks, trade dress and corporate names including, without limitation, the trademarks, trademark applications and trade names described in Annex I hereto and all reissues, extensions or renewals thereto.

2. **Collateral Assignment**. As collateral security for the prompt and complete payment and performance of all the Secured Obligations, together with any and all expenses which may be incurred by the Secured Party in collecting any or all of such Secured Obligations or enforcing any rights, obligations or liabilities under this Agreement, the Company hereby collaterally assigns to the Secured Party all of the Company’s right, title and interest in, to and under the following, whether presently existing or hereafter arising or acquired (collectively, the **“Collateral”**):

(a) all Copyrights;

(b) all Copyright Licenses;

(c) all proceeds and products of each Copyright and Copyright License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Copyright or Copyright License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (a) through (c), collectively the **“Copyright Collateral”**);

(d) all Patents;

(e) all Patent Licenses;

(f) all proceeds and products of each Patent and Patent License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Patent or Patent License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (d) through (f), collectively the **“Patent Collateral”**);

(g) all Trademarks;

(h) all Trademark Licenses;

(i) all proceeds and products of each Trademark and Trademark License, including without limitation, all income, royalties, damages and payments now or hereafter due and/or payable with respect to any Trademark or Trademark License, including damages and payments for past or future infringements thereof, the right to sue for past, present and future infringements thereof, and all rights corresponding thereto throughout the world (clauses (g) through (i), collectively the **“Trademark Collateral”**);

(j) causes of action, claims and warranties now or hereafter owned or acquired

by the Company in respect of any of the items listed above; and

- (k) all proceeds of any of the Collateral described in clauses (a) through (k).

Notwithstanding the foregoing provisions of this Section 2, such collateral assignment and grant of security interest shall not extend to, and the term "Collateral" shall not include, any of the foregoing which are now or hereafter held by the Company to the extent that (i) the same are not assignable or capable of being encumbered as a matter of law or under the terms of any agreement applicable thereto (except to the extent that such restriction does not impair the creation of a security interest under the UCC) without the consent of the other applicable party thereto and (ii) such consent has not been obtained; provided, however, that such grant of security interest shall extend to, and the term "Collateral" shall include (A) any and all proceeds of the foregoing to the extent that the assignment or encumbering of such proceeds is not so restricted and (B) upon any other applicable party's consent being obtained with respect to any of the foregoing that is otherwise excluded, thereafter the same as well as any and all proceeds thereof that might have theretofore been excluded from such grant of a security interest shall be included within the term "Collateral." Notwithstanding anything in this Agreement to the contrary, at any time prior to the occurrence of an Event of Default, subject to the Secured Party's consent, the Company shall have the right to grant to third parties licenses or sublicenses of any Proprietary Rights in which the Company has any right, title or interest.

3. Representations and Warranties. As an inducement to the Secured Party to enter into this Agreement, the Company makes the following representations and warranties:

- (a) Annex I sets forth a complete and correct list of all Copyrights, Copyright Licenses, Patents, Patent Licenses, Trademarks and Trademark Licenses in which the Company has any right, title or interest.

- (b) Except as disclosed in Schedule 3, the Company is the sole beneficial owner of the Collateral, free and clear of any liens, encumbrances, security interests, charges, or claims, except for the collateral assignment and security interest in favor of the Secured Party provided for herein, and the Company agrees that it will not grant any security interest, lien or encumbrance in the Collateral without prior written consent of the Secured Party.

- (c) Except pursuant to Copyright Licenses, Patent Licenses and Trademark Licenses and entered into by the Company in the ordinary course of business, which are listed in Annex I, the Company owns and possesses the right to use, and has done nothing to authorize or enable any other person or entity to use, the Copyrights, Patents and Trademarks listed on Annex I, and all registrations listed on Annex I are valid and in full force and effect.

- (d) Except as disclosed on Schedule 3, to the best of the Company's knowledge (i) there is no violation by others of any right of the Company with respect to any Copyright, Patent or Trademark listed on Annex I, (ii) the Company is not infringing in any respect upon any Copyright, Patent or Trademark of any other person or entity,

and (iii) no proceedings have been instituted or are pending against the Company, or to the Company's knowledge, threatened, alleging any such violation.

The Company agrees that it will at its expense and at the Secured Party's request, (i) defend the Collateral (subject to its reasonable business judgment) from any and all claims and demands of any other person or entity and (ii) that it will not grant, create or permit to exist any lien or encumbrance upon the Collateral in favor of any other person or entity, except to the extent existing on the date hereof. The Company hereby agrees to pay, indemnify, and hold the Secured Party harmless from and against any and all other liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses of disbursements of any kind or nature whatsoever ("Claims") with respect to the Collateral, including, without limitation, Claims of patent infringement, except for Claims made by the Secured Party or any Affiliate thereof, as such term is defined in the Securities Act of 1933, as amended, or Claims arising out of the negligence or willful conduct of the Secured Party.

4. Continued Use of the Copyrights, Patents and Trademarks. During the term of this Agreement, the Company shall utilize and employ the Copyrights, Patents and Trademarks listed on Annex I hereto in the same or similar manner as it has in the past, and shall employ the appropriate notice of such Copyrights and Patents in connection with the works for which such Copyrights, Patents and Trademarks were granted. The Company agrees to use its best ability to maintain the registration of the Copyrights, Patents and Trademarks listed on Annex I hereto in full force and effect by taking any action which it believes necessary in its reasonable business judgment, through attorneys of its choice, all at its expense. In the event that any of the Copyrights, Patents or Trademark is infringed by a third party, so as to have a material adverse effect on the Collateral or the Secured Party's rights with respect thereto, or if such infringement gives rise to litigation or to the filing of a claim or notice of opposition with the Copyright Office or the Patent and Trademark Office, as applicable, the Company shall promptly notify the Secured Party. Any damages recovered from the infringing party (less attorney's fees and court costs) shall be deemed to be part of the Collateral. The Company shall not assign this Agreement or any rights in the Copyright Collateral, Patent Collateral or the Trademark Collateral or the material protected thereby without the prior written approval of the Secured Party and such attempted assignment shall be void ab initio.

5. Continuing Liability. The Company hereby expressly agrees that, anything herein to the contrary notwithstanding, it shall remain liable under each license, interest and obligation assigned to the Secured Party hereunder to observe and perform all the conditions and obligations to be observed and performed by the Company thereunder, all in accordance with and pursuant to the terms and provisions thereof. The Secured Party shall not have any obligation or liability under any such license, interest or obligation by reason of or arising out of this Agreement or the collateral assignment thereof to the Secured Party or the receipt by the Secured Party of any payment relating to any such license, interest or obligation pursuant hereto, nor shall the Secured Party be required or obligated in any manner to perform or fulfill any of the obligations of the Company thereunder or pursuant thereto, or to make any payment, or to make any inquiry as to the nature or the sufficiency of any payment received by it or the sufficiency of any performance by any party under any such license, interest or obligation, or to present or file any claim, or to take any action to collect or enforce any performance or the payment of any amounts which may have been assigned to it or to which it may be entitled at time or times.

6. New Copyrights and Patents. If the Company shall (a) obtain rights to any new Copyrights or (b) obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension, or continuation-in-part of any Patent listed on Annex I or any improvement on any such Patent, or (c) become entitled to the benefit of any Trademark which benefit is not in existence on the date hereof or become aware of any existing Trademark of which the Company has not previously informed the Secured Party, the Company shall give to the Secured Party prompt notice thereof in writing hereof, and shall execute and deliver, and cause to be filed with the Copyright Office or the Patent and Trademark Office, as applicable, a modification of this Agreement amending Annex I hereto to include such new Copyright, Patent or Trademark thereon. Notwithstanding the foregoing) the Company hereby irrevocably appoints the Secured Party its true and lawful attorney (such appointment coupled with an interest), with full power of substitution, to execute an amendment of this Agreement on behalf of the Company amending Annex I hereto to include such new Copyright, Patent or Trademark.

7. Default. In the event (a) any representation of the Company set forth herein or in the Securities Purchase Agreement shall have not been true and correct in all material respects when made; (b) the Company shall fail to observe or perform any of its obligations, undertakings, or responsibilities hereunder for more than five (5) days after the date on which such observation or performance is required after written notice from the Secured Party to the Company; or (c) a default shall occur under the Consolidated Secured Note or an Additional Note, an event of default shall, without notice or demand, occur hereunder (each of the foregoing, an "Event of Default").

8. Remedies. (a) If an Event of Default has occurred, the Secured Party may exercise, in addition to all other rights and remedies granted to it in this Agreement and all documents, instruments, and agreements executed in connection therewith, all rights and remedies of a secured party under the Uniform Commercial Code. Without limiting the generality of the foregoing, the Company expressly agrees that in any such event the Secured Party, without demand of performance or other demand, advertisement or notice of any kind (except to such extent as notice may be required by applicable law with respect to the time or place of any public or private sale) to or upon the Company or any other person or entity (all and each of which demands, advertisements and/or notices are hereby expressly waived), may forthwith collect, receive, appropriate and realize upon the Collateral, or any part thereof, and/or may forthwith sell, lease, license, assign, give an option or options to purchase, or sell or otherwise dispose of and deliver said Collateral (or contract to do so), or any part thereof, in one or more parcels at public or private sale or sales, at any exchange, broker's board or at any of the Secured Party's offices or elsewhere at such prices as it may deem best, for cash or on credit or for future delivery without assumption of any credit risk. The Secured Party shall have the right upon any such public sale or sales, and, to the extent permitted by law, upon any such private sale or sales, to purchase the whole or any part of the Collateral so sold, free of any right or equity of redemption in the Company, which right or equity is hereby expressly waived and released. To the extent permitted by applicable law, the Company waives all claims, damages and demands against the Secured Party arising out of the repossession, retention or sale of the Collateral. Notwithstanding anything in this Agreement to the contrary, the Secured Party acknowledges and agrees that, in exercising its Remedies hereunder, (i) the Collateral may not be



sold, leased, licensed or otherwise disposed of except in a commercially reasonable manner as provided in Section 9-610 of the Uniform Commercial Code ("UCC"), (ii) the Collateral may not be sold, leased, licensed or otherwise disposed of privately to the Secured Party or an "affiliate" thereof, as such term is defined in the Securities Act of 1933, as amended, except in accordance with Section 9-610(c)(2) of the UCC if the collateral is of a kind that is customarily sold on a recognized market or the subject of widely distributed standard price quotations, and (iii) any consent by the Company or decision not to object to the Secured Party's acceptance of the Collateral in full or partial satisfaction of the obligations pursuant to Section 9-620 of the UCC will be subject to approval by a majority of the Company's stockholders (other than the Secured Party and any affiliate thereof), or their designees on the Board of Directors of the Company if the stockholder has such designee.

(b) Without limiting the generality of the foregoing, if an Event of Default has occurred,

(i) the Secured Party may license, or sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any Copyrights, Patents or Trademark included in the Collateral throughout the world for such term or terms, on such conditions and in such manner as the Secured Party shall in its sole discretion determine, the proceeds of such license or sublicense to be applied to the payment of the Secured Obligations;

(ii) the Secured Party may (without assuming any obligations or liability thereunder), at any time and from time to time, enforce (and shall have the exclusive right to enforce) against any licensee or sublicensee all rights and remedies of the Company in, to and under any Copyright Licenses, Patent Licenses or Trademark Licenses and take or refrain from taking any action under any thereof, and the Company hereby releases the Secured Party from, and agrees to hold the Secured Party free and harmless from and against, any claims arising out of any lawful action so taken or omitted to be taken with respect thereto other than any claims arising by reason of the Secured Party's (or affiliate's) own gross negligence or willful misconduct; and

(iii) upon request by the Secured Party, the Company will execute and deliver to the Secured Party a power of attorney, in form and substance satisfactory to the Secured Party, for the implementation of any lease, assignment, license, sublicense, grant of option, sale or other disposition of a Copyright, a Patent or a Trademark.

9. Grant of License to Use Intangibles. For the purpose of enabling the Secured Party to exercise rights and remedies under Section 8 hereof at such time as the Secured Party, without regard to this Section 9, shall be lawfully entitled to exercise such rights and remedies and for no other purpose, the Company hereby grants to the Secured Party an irrevocable, non-exclusive license (exercisable without payment of royalty or other compensation to the Company) to use, assign, license or sublicense any of the Collateral, whether now owned or hereafter acquired by the Company, and wherever the same be located, including in such license reasonable access to all media in which any of the licensed items may be recorded or stored and to all computer programs used for the compilation or printout thereof.

10. Power of Attorney. The Company hereby irrevocably appoints the Secured Party its true and lawful attorney (such appointment coupled with an interest), with full power of substitution, in the name of the Company, the Secured Party, or otherwise, for the sole use and benefit of the Secured Party, but at the Company's expense, to exercise (to the extent permitted by law), at any time and from time to time after an Event of Default has occurred until all of the Secured Obligations have been satisfied in full, all or any of the following powers with respect to all or any of the Collateral:

(a) to demand, sue for, collect, receive and give acquittance for any and all monies due or to become due thereon or by virtue thereof;

(b) to settle, compromise, compound, prosecute or defend any action or proceeding with respect thereto;

(c) to sell, transfer, assign or otherwise deal in or with the same or the proceeds or avails thereof, as fully and effectually as if the Secured Party were the absolute owner thereof; and

(d) to extend the time of payment of any or all thereof and to make any allowance and other adjustments with reference thereto.

11. Severability. If any provision of this Agreement is prohibited or unenforceable in any jurisdiction, such provision shall not invalidate the remaining provisions hereof, and any such prohibition or enforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

12. Termination. This Agreement and the security interest shall terminate when all of the Secured Obligations have been paid in full, at which time the Secured Party shall execute and deliver to the Company, at the Company's expense, all termination statements and similar documents (including, but not limited to, any termination statements or other documents to be filed with or submitted to the United States Patent and Trademark Office) which the Company shall reasonably request to evidence such termination and release of the Collateral hereunder.

13. No Waiver Cumulative Remedies. The Secured Party shall not, by any act, delay, omission or otherwise be deemed to have waived any of its rights or remedies hereunder, and no waiver shall be valid unless in writing, signed by the Secured Party, and then only to the extent therein set forth. A waiver by the Secured Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy which the Secured Party would otherwise have had on any other occasion. No failure to exercise nor any delay in exercising on the part of the Secured Party any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies hereunder provided are cumulative and may be exercised singly or concurrently, and are not exclusive of any rights and remedies provided by law.

14. Waivers; Amendments. None of the terms and provisions of this Agreement may be waived, altered, modified or amended except by an instrument in writing executed by the

parties hereto.

15. Limitation by Law. All rights, remedies and powers provided herein may be exercised only to the extent that the exercise thereof does not violate any applicable provision of law, and all the provisions hereof are intended to be subject to all applicable mandatory provisions of law which may be controlling and to be limited to the extent necessary so that they will not render this Agreement invalid, unenforceable in whole or in part or not entitled to be recorded, registered, or filed under the provisions of any applicable law.

16. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and shall inure to the benefit of the Secured Party and its successors and assigns, and nothing herein or in any document, instrument, or agreement executed in connection therewith is intended or shall be construed to give any other person any right, remedy or claim under, to or in respect thereof

17. APPLICABLE LAW. THIS AGREEMENT SHALL BE GOVERNED BY, AND BE CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF DELAWARE AND THE UNITED STATES OF AMERICA.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered as of the date first set forth above.

Genetix Pharmaceuticals Inc.

Johnson & Johnson Development Corporation

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

parties hereto.

15. Limitation by Law. All rights, remedies and powers provided herein may be exercised only to the extent that the exercise thereof does not violate any applicable provision of law, and all the provisions hereof are intended to be subject to all applicable mandatory provisions of law which may be controlling and to be limited to the extent necessary so that they will not render this Agreement invalid, unenforceable in whole or in part or not entitled to be recorded, registered, or filed under the provisions of any applicable law.

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Genetix Pharmaceuticals Inc.

Johnson & Johnson Development Corporation

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

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14. Waivers; Amendments. None of the terms and provisions of this Agreement may be waived, altered, modified or amended except by an instrument in writing executed by the parties hereto.

15. Limitation by Law. All rights, remedies and powers provided herein may be exercised only to the extent that the exercise thereof does not violate any applicable provision of law, and all the provisions hereof are intended to be subject to all applicable mandatory provisions of law which may be controlling and to be limited to the extent necessary so that they will not render this Agreement invalid, unenforceable in whole or in part or not entitled to be recorded, registered, or filed under the provisions of any applicable law.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered as of the date first set forth above.

Genetix Pharmaceuticals Inc.

Johnson & Johnson Development Corporation

By: \_\_\_\_\_

By:  \_\_\_\_\_

Title: \_\_\_\_\_

Title:  \_\_\_\_\_

## Annex I

### Licensed from the Dana Farber Cancer Institute per an agreement:

US 5,665,577 and foreign counterparts  
US 5,982,276 and foreign counterparts

### Licensed from Columbia University per an agreement:

US 6,372,502 and foreign counterparts

### Licensed from Theratechnologies per an agreement:

US 5,861,161 and foreign counterparts

### Licensed from MIT per an agreement:

US 5,928,914 and foreign counterparts  
US 5,631,162 and foreign counterparts  
US 5,861,488 and foreign counterparts  
US 6,051,402 and foreign counterparts

### Licensed from MIT and cross-licensed to Cobra Therapeutics per separate agreements:

US 5,126,260 and foreign counterparts

### Cross-licensed from Cobra Therapeutics per the above agreement:

US 5,532,143 and foreign counterparts

### Owned by the Company:

US 6,365,150 and foreign counterparts  
"Novel self-inactivating (SIN) retroviral vectors" (application) 10/137,788  
"Novel lentiviral packaging cells" (application) 60/085,283  
"Method of treating arthritis using lentiviral vectors in gene therapy" (application) 60/284,736  
"Method for inhibiting angiogenesis" (application) 60/350,005  
"Methods and compositions for transforming cells" (application) 08/664,084  
"Methods and compositions for transforming cells" (application) 09/293,303  
LentiGlobin™  
CardioGF™  
LentiPak™  
GenPak™  
StemShield™

### Owned by the Company and subject to a license option agreement with Cordis Corporation:

"Methods and compositions for promoting angiogenesis" (application) 60/264,457  
"Methods and compositions for promoting angiogenesis using monocytes" (application) 09/860,657  
"Methods and compositions for promoting angiogenesis using polyethylene glycol (PEG) copolymers" (application) 09/860,831