PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| Moise Azria | 09/15/2003 |
| Simon David Bateman | 08/28/2003 |
| Shoufeng Li | 09/08/2003 |

RECEIVING PARTY DATA

| Name: | Novartis AG |
|-----------------|-----------------|
| Street Address: | Lichtstrasse 35 |
| City: | Basel |
| State/Country: | SWITZERLAND |
| Postal Code: | 4056 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 10565455 |

CORRESPONDENCE DATA

Fax Number: (973)781-8064

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 862-778-5806

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Address Line 2: Bldg. 101

Address Line 4: East Hanover, NEW JERSEY 07936

| ATTORNEY DOCKET NUMBER: | PAT033288-US-PCT |
|-------------------------|------------------|
| NAME OF SUBMITTER: | Denise R. Cooper |

Total Attachments: 4

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> PATENT REEL: 024414 FRAME: 0393

ASSIGNMENT

We,

Moise AZRIA residing at Bundesplatz 6

Basel 4054 Switzerland

Simon David BATEMAN residing at 4 Farrington Lane

Randolph, New Jersey 07869

Shoufeng LI residing at 2108 Ackman Court

Bridgewater, New Jersey 08807,

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign to **Novartis AG**, a company organized under the laws of the Swiss Confederation, having a place of business at Lichtstrasse 35, Basel, Switzerland 4056, its successors, assigns and legal representatives, all our right, title and interest, which includes the right to and full benefit of such priorities as may now or hereafter be granted to us by local laws or by treaty, including any international convention for the protection of industrial property, in and for the United States and its territories and possessions in and to the invention entitled:

USE OF CALCITONIN IN OSTEOARTHRITIS

invented by us and described in the application for United States Letters Patent

Application No. 60/489,400, filed July 23, 2003,

including (1) said provisional application for United States Letters Patent and subsequent non-provisional or international application(s) designating the United States which claim the benefit of said provisional application, and all continuations and divisions thereof (including further continuations and divisions such as, but not limited to, continuations of continuations and divisions of continuations), (2) all United States Letters Patent which may be issued and/or granted on all such applications, (3) all applications for reissues and extensions of and reexamination certificates for all such United States Letters Patent and (4) all reissues and extensions and reexamination certificates issued for all such United States Letters Patent, the said interest being the entire ownership of said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates to be held and enjoyed by the said Novartis AG and its successors and assigns to the full end of the terms to which said United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates may be granted and/or issued, as fully and

PATENT REEL: 024414 FRAME: 0394 entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made;

And we hereby agree to sign and/or execute any further documents and/or instruments which may be necessary, lawful and proper in and/or for the filing and/or prosecution of said applications for United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates and/or the granting and/or issuance thereof and/or to otherwise secure title to said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates in said assignee.

| Signed this 15 | day of Sep feut | بئر 2003 b | у | Moise AZRIA | |
|----------------|-----------------|------------|---|---------------------|------|
| Signed this | day of | , 2003 b | у | Simon David BATEMAN | * ;: |
| Signed this | day of | , 2003 t | у | Shoufeng LI | |

ASSIGNMENT

We,

Moise AZRIA residing at Bundesplatz 6

Basel 4054 Switzerland

Simon David BATEMAN residing at 4 Farrington Lane

Randolph, New Jersey 07869

Shoufeng LI residing at 2108 Ackman Court

Bridgewater, New Jersey 08807,

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PATENT REEL: 024414 FRAME: 0396 entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made;

And we hereby agree to sign and/or execute any further documents and/or instruments which may be necessary, lawful and proper in and/or for the filing and/or prosecution of said applications for United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates and/or the granting and/or issuance thereof and/or to otherwise secure title to said invention and all of said applications, United States Letters Patent (including reissue Letters Patent), extensions and reexamination certificates in said assignee.

| Signed this day of , 2003 | by | |
|--|------|---------------------|
| | | Moise AZRIA |
| Signed this 28 day of August, 2003 | hv | Simon De Butano |
| day of the grade and the grade | . Dy | Simon David BATEMAN |
| Signed this & day of September 2003 | by | Asle |
| digited this g day of year, 2000 | Бу | Shoufeng LI |