

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Qingping Zeng</td> <td>12/17/2009</td> </tr> <tr> <td>Warren S. Wade</td> <td>12/17/2009</td> </tr> <tr> <td>John Bruce Patterson</td> <td>12/17/2009</td> </tr> </tbody> </table>		Name	Execution Date	Qingping Zeng	12/17/2009	Warren S. Wade	12/17/2009	John Bruce Patterson	12/17/2009
Name	Execution Date								
Qingping Zeng	12/17/2009								
Warren S. Wade	12/17/2009								
John Bruce Patterson	12/17/2009								
RECEIVING PARTY DATA									
Name:	MannKind Corporation								
Street Address:	28903 North Avenue Paine								
City:	Valencia								
State/Country:	CALIFORNIA								
Postal Code:	91355								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13505530</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13505530				
Property Type	Number								
Application Number:	13505530								
CORRESPONDENCE DATA									
<p>Fax Number: (202)824-3001          Phone: 2028243291          Email: lhemmendinger@bannerwitcoff.com,bharrison@bannerwitcoff.com,BWPTOPAT@bannerwitcoff.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent          Name: Lisa M. Hemmendinger          Address Line 1: 1100 13th Street, NW          Address Line 2: Suite 1200          Address Line 4: Washington, DISTRICT OF COLUMBIA 20005-4051</p>									
ATTORNEY DOCKET NUMBER:	005184.00064								

NAME OF SUBMITTER:

Lisa M. Hemmendinger

**Total Attachments: 4**

source=assignment from parent-inventors to MannKind Corporation#page1.tif

source=assignment from parent-inventors to MannKind Corporation#page2.tif

source=assignment from parent-inventors to MannKind Corporation#page3.tif

source=assignment from parent-inventors to MannKind Corporation#page4.tif

ASSIGNMENT

We, Qingping ZENG, Warren S. WADE, and John Bruce PATTERSON ("ASSIGNORS"), have invented subject matter ("INVENTIONS") disclosed in a patent application entitled "TRE-1 $\alpha$  Inhibitors" ("APPLICATION"), which was filed on November 3, 2009 and was given U.S. Serial No. 61/257,696; and

MannKind Corporation, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTIONS and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTIONS and the APPLICATION and APPLICATION DERIVATIVES;

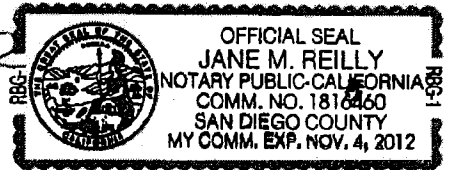
ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Qingping ZENG

December 17, 2009  
DATE

Warren S. Wade  
Warren S. WADE



\_\_\_\_\_  
DATE

\_\_\_\_\_  
John Bruce PATTERSON

State of California  
County of San Diego  
Subscribed & sworn to (or affirmed) before me on  
this 17<sup>th</sup> day of December, 2009,  
by Warren S. Wade  
proved to me on the basis of satisfactory evidence  
to be the person(s) who appeared before me.

Signature Jane M. Reilly (Seal)

**ASSIGNMENT**

We, Qingping ZENG, Warren S. WADE, and John Bruce PATTERSON (“ASSIGNORS”), have invented subject matter (“INVENTIONS”) disclosed in a patent application entitled “**IRE-1 $\alpha$  Inhibitors**” (“APPLICATION”), which was filed on November 3, 2009 and was given U.S. Serial No. 61/257,696; and

MannKind Corporation, on behalf of itself and its successors and assigns (“ASSIGNEE”), is entitled to and wants to own the entire and exclusive rights, title and interest in the INVENTIONS and the APPLICATION and all other applications and patents derived therefrom in the United States, its territories, and all foreign countries (“APPLICATION DERIVATIVES”);

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign, and transfer to the ASSIGNEE the entire and exclusive rights, title and interest in the INVENTIONS and the APPLICATION and APPLICATION DERIVATIVES;

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION and APPLICATION DERIVATIVES.

December 17, 2009  
DATE

  
\_\_\_\_\_  
Qingping ZENG

\_\_\_\_\_  
DATE

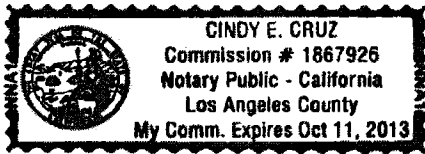
\_\_\_\_\_  
Warren S. WADE

December 17, 2009  
DATE

  
\_\_\_\_\_  
John Bruce PATTERSON

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California  
 County of Los Angeles }  
 On Dec 17, 2009 before me, Cindy Cruz Notary Public  
Date Here Insert Name and Title of the Officer  
 personally appeared John Patterson  
Name(s) of Signer(s)



who proved to me on the basis of satisfactory evidence to be the person~~s~~ whose name~~s~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity~~(ies)~~, and that by his/~~her/their~~ signature~~s~~ on the instrument the person~~s~~, or the entity upon behalf of which the person~~s~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Cindy Cruz  
Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: Assignment for 5184 00049

Document Date: December 17, 2009 Number of Pages: 1

Signer(s) Other Than Named Above: Qingping zeng, warren wade

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: John Patterson Signer's Name: \_\_\_\_\_

Corporate Officer — Title(s): \_\_\_\_\_  Corporate Officer — Title(s): \_\_\_\_\_

Individual  Partner —  Limited  General  Individual  Partner —  Limited  General

Attorney in Fact  Attorney in Fact

Trustee  Trustee

Guardian or Conservator  Guardian or Conservator

Other: \_\_\_\_\_  Other: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_ Signer Is Representing: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

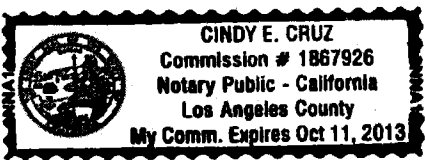
**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Los Angeles

On Dec 17, 2009 before me, Cindy Cruz, Notary Public

personally appeared Qingping Zeng



who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: [Handwritten Signature]  
Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: Assignment 5184 00049

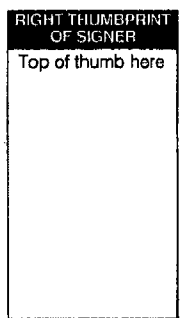
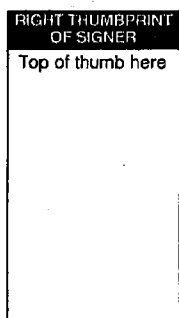
Document Date: December 17, 2009 Number of Pages: 1

Signer(s) Other Than Named Above: John Patterson; Warren Wade

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: Qingping Zeng Signer's Name: \_\_\_\_\_

- |  |  |
|--|--|
| <input type="checkbox"/> Corporate Officer — Title(s): _____   | <input type="checkbox"/> Corporate Officer — Title(s): _____   |
| <input checked="" type="checkbox"/> Individual   | <input type="checkbox"/> Individual  |
| <input type="checkbox"/> Partner — <input type="checkbox"/> Limited <input type="checkbox"/> General | <input type="checkbox"/> Partner — <input type="checkbox"/> Limited <input type="checkbox"/> General |
| <input type="checkbox"/> Attorney in Fact  | <input type="checkbox"/> Attorney in Fact  |
| <input type="checkbox"/> Trustee   | <input type="checkbox"/> Trustee   |
| <input type="checkbox"/> Guardian or Conservator   | <input type="checkbox"/> Guardian or Conservator   |
| <input type="checkbox"/> Other: _____  | <input type="checkbox"/> Other: _____  |



Signer Is Representing: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_