

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7159934

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JEFFERY HAINES	10/06/2021
KEITH CROSBY	10/06/2021
MEGHAN DRUMMOND SAMUELSON	01/18/2022
DAVID FRENDEWEY	01/12/2022
BRIAN ZAMBROWICZ	10/05/2021
ANDREW J. MURPHY	10/25/2021
RECEIVING PARTY DATA	
Name:	REGENERON PHARMACEUTICALS, INC.
Street Address:	777 OLD SAW MILL RIVER ROAD
City:	TARRYTOWN
State/Country:	NEW YORK
Postal Code:	10591-6707
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16891571
CORRESPONDENCE DATA	
Fax Number:	(919)862-2260
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	919-862-2200
Email:	lorraine.pineda@alston.com
Correspondent Name:	ALSTON & BIRD
Address Line 1:	555 FAYETTEVILLE ST., SUITE 600
Address Line 4:	RALEIGH, NORTH CAROLINA 27601
ATTORNEY DOCKET NUMBER:	057766/547048
NAME OF SUBMITTER:	STEPHEN H. SCHILLING
SIGNATURE:	/Stephen H. Schilling/
DATE SIGNED:	02/04/2022
Total Attachments: 12	

source=10447US01-Executed_Assignments#page1.tif
source=10447US01-Executed_Assignments#page2.tif
source=10447US01-Executed_Assignments#page3.tif
source=10447US01-Executed_Assignments#page4.tif
source=10447US01-Executed_Assignments#page5.tif
source=10447US01-Executed_Assignments#page6.tif
source=10447US01-Executed_Assignments#page7.tif
source=10447US01-Executed_Assignments#page8.tif
source=10447US01-Executed_Assignments#page9.tif
source=10447US01-Executed_Assignments#page10.tif
source=10447US01-Executed_Assignments#page11.tif
source=10447US01-Executed_Assignments#page12.tif

ASSIGNMENT

WHEREAS, WE, Jeffery HAINES, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, Keith CROSBY, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, Meghan DRUMMOND SAMUELSON, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, David FRENDEWEY, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, Brian ZAMBROWICZ, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and Andrew J. MURPHY, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, REGENERON PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof, and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date:

Oct 6 / 2021

Date:

Date:

Date:

Date:

Date:


Jeffrey HAINES

Keith CROSBY

Meghan DRUMMOND SAMUELSON

David FRENDEWEY

Brian ZAMBROWICZ

Andrew J. MURPHY

ASSIGNMENT

WHEREAS, WE, Jeffery HAINES, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, Keith CROSBY, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, Meghan DRUMMOND SAMUELSON, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, David FRENDEWEY, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, Brian ZAMBROWICZ, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and Andrew J. MURPHY, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, REGENERON PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date: _____

Date: 10/6/21

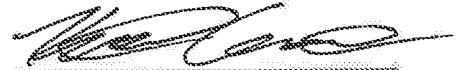
Date: _____

Date: _____

Date: _____

Date: _____

Jeffery HAINES



Keith CROSBY

Meghan DRUMMOND SAMUELSON

David FRENDEWEY

Brian ZAMBROWICZ

Andrew J. MURPHY

ASSIGNMENT

WHEREAS, WE, **Jeffery HAINES**, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, **Keith CROSBY**, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, **Meghan DRUMMOND SAMUELSON**, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, **David FRENDEWEY**, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, **Brian ZAMBROWICZ**, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and **Andrew J. MURPHY**, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, **REGENERON PHARMACEUTICALS, INC.**, a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date: _____

Jeffery HAINES

Date: _____

Keith CROSBY

Date: 1-18-2022


Meghan DRUMMOND SAMUELSON

Date: _____

David FRENDEWEY

Date: _____

Brian ZAMBROWICZ

Date: _____

Andrew J. MURPHY

ASSIGNMENT

WHEREAS, WE, Jeffery HAINES, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, Keith CROSSBY, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, Meghan DRUMMOND SAMUELSON, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, David FRENDEWEY, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, Brian ZAMBROWICZ, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and Andrew J. MURPHY, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, REGENERON PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date: _____

Jeffery HAINES

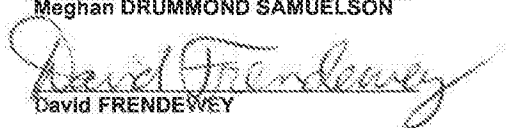
Date: _____

Keith CROSBY

Date: _____

Meghan DRUMMOND SAMUELSON

Date: 12-Jan-2022


David FRENDEY

Date: _____

Brian ZAMBROWICZ

Date: _____

Andrew J. MURPHY

ASSIGNMENT

WHEREAS, WE, Jeffery HAINES, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, **Keith CROSBY**, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, **Meghan DRUMMOND SAMUELSON**, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, **David FRENDEWEY**, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, **Brian ZAMBROWICZ**, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and **Andrew J. MURPHY**, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, REGENERON PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date: _____

Jeffery HAINES

Date: _____

Keith CROSBY

Date: _____

Meghan DRUMMOND SAMUELSON

Date: _____

David FRENDEWEY

Date: 10/5/21

Brian ZAMBROWICZ

Date: _____

Andrew J. MURPHY

ASSIGNMENT

WHEREAS, WE, Jeffery HAINES, residing at 2131 1st Avenue, Apartment 4, New York, NY 10029, a citizen of Canada, Keith CROSBY, residing at 14 Mountain Trail, Pleasantville, NY 10570, a citizen of the United States of America, Meghan DRUMMOND SAMUELSON, residing at 9 Deerfield Lane, Katonah, NY 10536, a citizen of the United States of America, David FRENDEWEY, residing at 330 East 38th Street, Apartment 53A, New York, NY 10016, a citizen of the United States of America, Brian ZAMBROWICZ, residing at 250 Kelbourne Avenue, Sleepy Hollow, NY 10591, a citizen of the United States of America, and Andrew J. MURPHY, residing at 10 Newton Court, Croton-on-Hudson, NY 10520, a citizen of the United States of America (HEREINAFTER CALLED "ASSIGNORS"), are inventors of the invention(s) disclosed and/or claimed in the following patent application:

"NON-HUMAN ANIMALS COMPRISING A HUMANIZED TTR LOCUS WITH A BETA-SLIP MUTATION AND METHODS OF USE"

U.S. Application No. 16/891,571; filed June 3, 2020

WHEREAS, REGENERON PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of New York, with offices at 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707, U.S.A. (HEREINAFTER called "ASSIGNEE") is desirous of acquiring our entire right, title and interest in, to, and under said applications;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, WE, said ASSIGNORS, have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors, legal representatives, and assigns, our entire right, title and interest for all countries in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the above-described patent applications, and in and to said patent applications and all divisions, renewals, continuations, and continuations-in-part thereof, and all Patents which may be granted thereon and all reexamination certificates, amendments, and reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said inventions in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said patent applications under the Patent Laws of the United States or any other country or countries foreign to the United States, the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention, or under any other applicable international agreement or under the domestic laws of the country in which any such patent application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said inventions in any country or countries foreign to the United States and all extensions, renewals, reexamination certificates, amendments, and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States and any Official of any country or countries foreign to the United States whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, their successors, legal representatives and assigns, in accordance with this instrument;

AND WE HEREBY covenant and agree that WE have full right to convey the entire interest hereinafter assigned, and that WE have not executed, and will not execute, any agreement in conflict herewith;

AND WE HEREBY further covenant and agree that WE will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, continuation-in-part, reissue, reexamination, and foreign applications, make all rightful

oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said inventions in all countries.

IN TESTIMONY WHEREOF, WE hereunto set OUR hands and seal the day and year set opposite our signatures.

Date: _____

Jeffery HAINES

Date: _____

Keith CROSBY

Date: _____

Meghan DRUMMOND SAMUELSON

Date: _____

David FRENDEWEY

Date: _____

Brian ZAMERONISZ

Date: October 25, 2021

Andrew J. MURPHY