

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4585194

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
PETER KUMPALUME	03/31/2016
OLIVER SCHON	03/31/2016
CHRISTINA PATRICIA DONAHUE	03/31/2016
GHOTAS EVINDAR	03/31/2016
DAVID I. ISRAEL	03/31/2016
LETIAN KUAI	03/31/2016
NINAD V. PRABHU	03/31/2016
DAVID PAOLELLA	03/31/2016
RECEIVING PARTY DATA	
Name:	GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED
Street Address:	980 GREAT WEST ROAD
City:	BRENTFORD, MIDDLESEX
State/Country:	ENGLAND
Postal Code:	TW89GS
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	15026725
Application Number:	15698020
CORRESPONDENCE DATA	
Fax Number:	(610)270-5090
<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:	610-270-6812
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Address Line 2:	UW2220
Address Line 4:	KING OF PRUSSIA, PENNSYLVANIA 19406
ATTORNEY DOCKET NUMBER:	PR65565

NAME OF SUBMITTER:	JAMES J. KANG
SIGNATURE:	/James J. Kang/
DATE SIGNED:	09/08/2017
Total Attachments: 12 source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page1.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page2.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page3.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page4.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page5.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page6.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page7.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page8.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page9.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page10.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page11.tif source=PR65565_WO_WW_Assignment_PCT.IB2014.064998#page12.tif	

ASSIGNMENT

WHEREAS I/WE, Peter KUMPALUME a citizen of Malawi of Stevenage, Hertfordshire, and Oliver SCHON a citizen of Germany of Cambridge, GB, (hereinafter called "the inventor(s)") have invented or discovered certain improvements in **COMPOUNDS FOR AFFINITY CHROMATOGRAPHY AND FOR EXTENDING THE HALF-LIFE OF A THERAPEUTIC AGENT** (hereinafter referred to as "the invention and improvements") for which provisional applications under 35 U.S.C. §111(b) were filed in the United States of America on 01 Oct 2013 and 17 Jul 2014 under application numbers 61/885146 and 62/025994 and for which a PCT international application PCT/IB2014/064998 was filed on 01 October 2014, designating the United States of America.

WHEREAS the invention and improvements, being made in the course of my employment, belong to my/our employer at that time, namely GLAXOSMITHKLINE SERVICES UNLIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, and

WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE SERVICES UNLIMITED the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES UNLIMITED of the invention and improvements and the application by operation of law and, if under the law of the United States of America I/we the inventor(s) have any ownership right, title and interest in and to the invention and improvements and the application, (which I/we do not believe to be the case and claim no ownership right, title or interest in and to the invention and improvements and to the application based on the law of the United Kingdom), I/we the inventor(s) nevertheless hereby assign and transfer such ownership right, title and interest in and to the invention and improvements and to the application, including the right to claim priority from the application in respect of any subsequent applications, to GLAXOSMITHKLINE SERVICES UNLIMITED. GLAXOSMITHKLINE

improvements and to the application based on the law of the United Kingdom), I/we the inventor(s) nevertheless hereby assign and transfer such ownership right, title and interest in and to the invention and improvements and to the application, including the right to claim priority from the application in respect of any subsequent applications, to GLAXOSMITHKLINE SERVICES UNLIMITED. GLAXOSMITHKLINE SERVICES UNLIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in and to the invention and in and to the application.

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED** its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and I/we the inventor(s) and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED**;

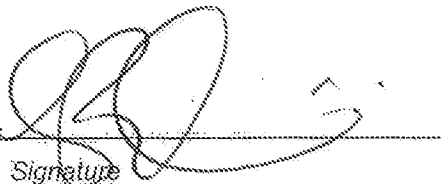
AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/ourselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and deliver any and all other instruments in writing, and any and all further acts, applications, papers, affidavits, assignments and other documents which may be possible and are necessary or desirable to more effectually secure to and vest in **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED**, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the 01 Oct 2013, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

Peter KUMPALUME: 

Oliver SCHON: _____

SIGNED by Edward R. Gimmi As the Attorney & Authorised Official of GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED:


Signature

Date: 6 April 2016

ASSIGNMENT

WHEREAS I/WE, Peter KUMPALUME a citizen of Malawi of Stevenage, Hertfordshire, United Kingdom and Oliver SCHON a citizen of Germany of Cambridge, United Kingdom, (hereinafter called "the inventor(s)") have invented or discovered certain improvements in "COMPOUNDS FOR AFFINITY CHROMATOGRAPHY AND FOR EXTENDING THE HALF-LIFE OF A THERAPEUTIC AGENT" (hereinafter referred to as "the invention and improvements") for which priority application 61/885146 was filed on 01 Oct 2013 in the United States, and for which a PCT international application PCT/IB2014/064998 was filed on 01 Oct 2014, designating the United States of America.

WHEREAS the invention and improvements, being made in the course of my employment, belong to my/our employer at that time, namely GLAXOSMITHKLINE SERVICES UNLIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, and

WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE SERVICES UNLIMITED the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES UNLIMITED of the invention and improvements and the application by operation of law and, if under the law of the United States of America I/we the inventor(s) have any ownership right, title and interest in and to the invention and improvements and the application, (which I/we do not believe to be the case and claim no ownership right, title or interest in and to the invention and

improvements and to the application based on the law of the United Kingdom), I/we the inventor(s) nevertheless hereby assign and transfer such ownership right, title and interest in and to the invention and improvements and to the application, including the right to claim priority from the application in respect of any subsequent applications, to GLAXOSMITHKLINE SERVICES UNLIMITED. GLAXOSMITHKLINE SERVICES UNLIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in and to the invention and in and to the application.

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED** its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and I/we the inventor(s) and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED**;

AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/ourselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and deliver any and all other instruments in writing, and any and all further acts, applications, papers, affidavits, assignments and other documents which may be possible and are necessary or desirable to more effectually secure to and vest in **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED**, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the 01 Oct 2013, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

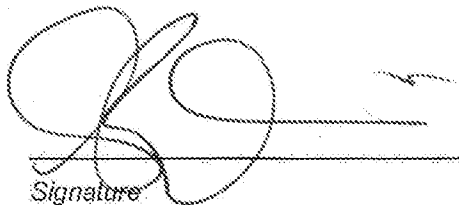
Peter KUMPALUME: _____

Oliver SCHON: _____



3 March 2016

SIGNED by Edward R. Gimmi As the Attorney & Authorised Official of GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED:


Signature

Date: 6 April 2016

ASSIGNMENT

WHEREAS I/WE, Christine Patricia DONAHUE a citizen of United States of Waltham, Massachusetts, USA, Ghotas EVINDAR a citizen of Canada of Waltham, Massachusetts, USA, David I. ISRAEL a citizen of Concord, Massachusetts, USA, David PAOLELLA a citizen of King of Prussia, Pennsylvania, USA, Letian KUAL a citizen of China P.R. of Waltham, Massachusetts, USA, and Ninad V. PRABHU a citizen of United States of Waltham, MA, (hereinafter called "the inventor(s)") have invented or discovered certain improvements in "COMPOUNDS FOR AFFINITY CHROMATOGRAPHY AND FOR EXTENDING THE HALF-LIFE OF A THERAPEUTIC AGENT" (hereinafter referred to as "the invention and improvements") for which priority application '61/885146 was filed on 01 Oct 2013 in the United States, and for which a PCT international application PCT/IB2014/064998 was filed on 01 Oct 2014, designating the United States of America.

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, USA, whose registered address is 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, United States of America, is desirous of acquiring the whole right, title and interest in and to said invention and improvements, and in and to any applications for said invention and improvements, including the right to claim priority, and in and to and any Letters Patent to be obtained therefor, in all countries, including the United States, its territories and possessions, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE LLC the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern, be it known that I/we, Christine Patricia DONAHUE, Ghotas EVINDAR, David I. ISRAEL, David PAOLELLA, Letian KUAL and Ninad V. PRABHU for good and valuable consideration unto me/us moving, the receipt whereof is hereby acknowledged, have sold,

assigned and transferred, and by these presents do sell, assign and transfer my/our whole right, title and interest in and to said invention and improvements to said GLAXOSMITHKLINE LLC, throughout the United States of America, its territories and possessions, and in and to said application, and any extensions, reissues, continuations, continuations-in-part, and any divisions thereof, and in and to any and all Letters Patent of the United States of America, including any priority rights under the International Convention

AND, my/our whole right, title and interest in and to said invention and improvements to GLAXOSMITHKLINE LLC, in all other countries throughout the world, and in and to any applications in said other countries, and continuations-in-part, patents of addition, revalidation patents, patents of importation, registrations, and any renewals, extensions and divisions thereof, and in and to any and all Letters Patent of said all other countries which may be granted on said invention and improvements including any priority rights under the International Convention.

GLAXOSMITHKLINE LLC in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof

AND I/we the inventor(s) and GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED;

AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/ourselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and

deliver any and all other instruments in writing, and any and all further acts, applications, papers, affidavits, assignments and other documents which may be possible and are necessary or desirable to more effectually secure to and vest in GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the 01 Oct 2013, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

Christine Patricia DONAHUE:



DATE March 31, 2016

Ghotas EVINDAR:



DATE March 31/2016

David I. ISRAEL:

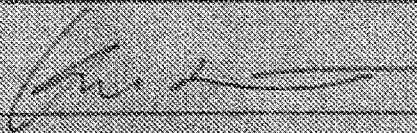


DATE March 31, 2016

David PAOLELLA:

DATE _____

Letian KUAI:



DATE March 31/2016

Ninad V. PRABHU:



DATE March 31/2016

SIGNED by Edward R. Gimmi As the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED:



Signature

Date: 6 Apr 2016

PATENT

REEL: 043530 FRAME: 0086

ASSIGNMENT

WHEREAS I/WE, Christine Patricia DONAHUE a citizen of United States of Waltham, Massachusetts, USA, Ghotas EVINDAR a citizen of Canada of Waltham, Massachusetts, USA, David I. ISRAEL a citizen of Concord, Massachusetts, USA, David PAOLELLA a citizen of King of Prussia, Pennsylvania, USA, Letian KUAI a citizen of China P.R. of Waltham, Massachusetts, USA, and Ninad V. PRABHU a citizen of United States of Waltham, MA, (hereinafter called "the inventor(s)") have invented or discovered certain improvements in "COMPOUNDS FOR AFFINITY CHROMATOGRAPHY AND FOR EXTENDING THE HALF-LIFE OF A THERAPEUTIC AGENT" (hereinafter referred to as "the invention and improvements") for which priority application '61/885146 was filed on 01 Oct 2013 in the United States, and for which a PCT international application PCT/IB2014/064998 was filed on 01 Oct 2014, designating the United States of America.

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, USA, whose registered address is 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, United States of America, is desirous of acquiring the whole right, title and interest in and to said invention and improvements, and in and to any applications for said invention and improvements, including the right to claim priority, and in and to any Letters Patent to be obtained therefor, in all countries, including the United States, its territories and possessions, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE LLC the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern, be it known that I/we, Christine Patricia DONAHUE, Ghotas EVINDAR, David I. ISRAEL, David PAOLELLA, Letian KUAI and Ninad V. PRABHU for good and valuable consideration unto me/us moving, the receipt whereof is hereby acknowledged, have sold,

assigned and transferred, and by these presents do sell, assign and transfer my/our whole right, title and interest in and to said invention and improvements to said GLAXOSMITHKLINE LLC, throughout the United States of America, its territories and possessions, and in and to said application, and any extensions, reissues, continuations, continuations-in-part, and any divisions thereof, and in and to any and all Letters Patent of the United States of America, including any priority rights under the International Convention

AND, my/our whole right, title and interest in and to said invention and improvements to GLAXOSMITHKLINE LLC, in all other countries throughout the world, and in and to any applications in said other countries, and continuations-in-part, patents of addition, revalidation patents, patents of importation, registrations, and any renewals, extensions and divisions thereof, and in and to any and all Letters Patent of said all other countries which may be granted on said invention and improvements including any priority rights under the International Convention.

GLAXOSMITHKLINE LLC in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof

AND I/we the inventor(s) and GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED;

AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/ourselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and

deliver any and all other instruments in writing, and any and all further acts, applications, papers, affidavits, assignments and other documents which may be possible and are necessary or desirable to more effectually secure to and vest in **GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED**, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the 01 Oct 2013, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

Christine Patricia DONAHUE: _____ DATE _____

Ghotas EVINDAR: _____ DATE _____

David I. ISRAEL: _____ DATE _____

David PAOLELLA: DM _____ DATE 31 Mar 2016

Loñian KUAL: _____ DATE _____

Ninad V. PRABHU: _____ DATE _____

SIGNED by Edward R. Gimmi As the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED:


Signature

Date: 6 April 2016