# 503981829 08/29/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4028485

SUBMISSION TYPE:		NEW ASSIGNMENT			
ATURE OF CONVEYAN	ICE:	ASSIGNMENT			
CONVEYING PARTY DA	ТА				
		Name	Execution Date		
VIKKI FURMINGER		11/21/2013			
OWEN HUGHES			11/23/2013		
CHRISTOPHER THOMS	ON		12/04/2013		
DARREN MARK LEGRA	ND		12/04/2013		
EMILY STANLEY			12/04/2013		
RECEIVING PARTY DA	ГА				
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PROPERTY NUMBERS	Total: 1				
Property Type		Number			
Application Number:		14653649			
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AME OF SUBMITTER:		STEPHANIE GEIS			
SIGNATURE:		/Stephanie Geis/			
DATE SIGNED:					
		08/29/2016			

# **Total Attachments: 12**

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### ASSIGNMENT

This Assignment Agreement is entered into by and between

Vikki FURMINGER	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Horsham Research Centre
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
		Great Britain
Owen HUGHES	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
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Christopher THOMSON	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Horsham Research Centre
		Wimblehurst Road
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		Great Britain
Darren Mark LEGRAND	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
		GB
Emily STANLEY	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Novartis Horsham Research Centre
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
		GB

(hereinafter "Inventor(s)"), and Novartis Pharmaceuticals UK Limited, Frimley Business Park. Frimley, Camberley, Surrey GU16 7SR, UK, a company organized under the laws of Great Britain.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Pharmaceuticals UK Limited is the true and lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and

transfer to Novartis Pharmaceuticals UK Limited and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

## Autotaxin inhibitors [Patent Application PAT055490]

and filed in the \_\_\_\_\_\_Office on \_\_\_\_\_, 20 \_\_\_\_\_and accorded Application Number \_\_\_\_\_\_\_and/or filed as a PCT International Application on \_\_\_\_\_\_, 20 \_\_\_\_\_and accorded International Patent Application Number PCT/\_\_\_\_\_\_; and/or filed in the United States Patent and Trademark Office on December 19, 2012 and accorded Application Number 61/739,214, March 15, 2013 and accorded Application Number 61/787,796 and November 13, 2013 and accorded Application Number 61/903,928;

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

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(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and:

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

#### Patent Family Number PAT055490

This Assignment is effective as from the earliest priority date as stated above.

Executed this 21 day of <u>Khower</u>, 2013.

<b>1</b>	$\mathcal{A}(\mathcal{A})$	
BY_	V12123892/3853162mm	£5S,
Vikki	FURMINGER	

Witnessed by:

Name: NATALLE OSHONO NAME: NATALLE OSHONO NAME: NATALLE OSHONO NAME: NATALLE TRUCA Address: Address: NOLAETS PHARMACENTICALS NOMALENCEST ROAD NAMELINGEST ROAD HORSIGN AS SUBSECT EAST SAR HORSHAM, WEST SUBSEX. RM2 543 HORSIGN AS SUBSECT EAST SAR

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_,

BY	L.S.
Owen HUGHES	

Witnessed by:

Name:	
Address:	

Name: Address:

Executed this 4 day of December, 2013.

B Auns \_\_\_\_\_\_L.s. BY Christopher THOMSON

Witnessed by:

Name: NATALLE EXMONIO Address: NOVARTE PARMACEUTEAS

NHBLENURT ROAD HORSMAN, W-SX. RHID-SAS

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Name: Addres	paraka Maer Si
	BACKARINE & PARALENCES CARLINGERIAN
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#### Patent Family Number PAT055490

Executed this 4 day of December, 2013.

BY <u>Champen he C</u>LS. Darren Mark LEGRAND

Witnessed by:

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Name: Matalle CSMOND Address: NOVARTS PRARMORUMENTA NOMBLEMURT PORS MOREMAN, MILLSAR Address: Name: Micha Chinese. Address: Manufine: Manufine: Another Manufine: Manufine: Another Manufine: Manufine: Manufine: Mail 2. 58%

Executed this 4 day of Occember , 20 13.

BY ENSKA L.S. Emily STANLEY

Witnessed by:

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## Patent Family Number PAT055490

## NOVARTIS PHARMACEUTICALS UK LIMITED

Executed this 18 day of Decomber , 2013.

BY L.S. Name: EMMAN HOODE

Title: Authorized Signatory

Witnessed by:

Name: NATOLLE COSTORIAS Address: WORDERS PHARMACEONIAS LAWTO WAR BLE MERST RD Hoesnon, was Run SAG

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Name: March March - Warrand March Nederland and the Constant Chinese Chinese Chinese Constant and the second second second second second second s Address: have a new and the down

NO 5% 2412568

#### ASSIGNMENT

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Vikki FURMINGER	citizen of Lipited Vineders	Novartis Pharmaceuticals UK Limited
VIANTURININGER	citizen of United Kingdom	
		Horsham Research Centre
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
		Great Britain
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l.		Wimblehurst Road
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		GB
Emily STANLEY	citizen of United Kingdom	Novartis Pharmaceuticals UK Limited
		Novartis Horsham Research Centre
		Wimblehurst Road
		Horsham, West Sussex RH12 5AB
		GB

(hereinafter "Inventor(s)"), and Novartis Pharmaceuticals UK Limited, Frimley Business Park, Frimley, Camberley, Surrey GU16 7SR, UK, a company organized under the laws of Great Britain.

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## Autotaxin inhibitors [Patent Application PAT055490]

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(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

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Executed this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_.

BY\_\_\_\_\_L.S. Vikki FURMINGER

Witnessed by:

Name: Address: Name: Address:

Executed this 23rd day of NOVEWER , 2013.

\_\_\_\_\_L.S. BY \_\_\_\_\_( Owen HUGHES

Witnessed by:

Name: Cowal KBANE Address: 56 MAIN STREET SMAREJONE LEICESTERSHIRE DEIR FOR

M. Mato: Ouit

Name: MICHAEL MORETON-SMITH Address: 35 MILLBANK WARWICK CV34 STH

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Executed this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20 \_\_\_\_,

BY \_\_\_\_\_L.S. Christopher THOMSON

Witnessed by:

Name: Address: Name: Address:

Executed i	this	day	of	20	
		 ~		 	

BY\_\_\_\_\_L.S. Darren Mark LEGRAND

Witnessed by:

Name: Address:

Name: Address:

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Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

BY\_\_\_\_\_L.S. Emily STANLEY

Witnessed by:

Name: Address: Name: Address:

## NOVARTIS PHARMACEUTICALS UK LIMITED

Executed this 1% day of  $0.27\%/10^{-1}$ , 2013.

......

L.S.

ΒY

Name: // Evy MA HODEC Title: Authorized Signatory

Witnessed by:

Name: NATALLE CELLOSIO Address: NOVAETIS PHARMACONTICALS ME CTO NOMBLEMURST RO MORMANY, US - SX - REVIZ SAS Name: Monthe Houses. Address: Mannes: Mannesconcerne we are Mannes & Mannes Real Mannes & Mannes Real