ASSIGNMENT

WHEREAS I/We, the below-named inventor(s) (hereinafter referred to as Assignor(s)), of an invention entitled:

MODULATORS OF ALPHA-1 ANTITRYPSIN

as disclosed and claimed in the applications identified below this paragraph:

Application Number	Country of Filing	Filing Date
15/931,256	US	2020-05-13
PCT/US2020/032832	PCT	2020-05-14
P20200101375	Argentina	2020-05-14
109116114	Taiwan	2020-05-14
38696	Uruguay	2020-05-13
	Venezuela	2020-05-14

[a]: We authorize and request a patent practitioner of record in this application, to insert the filing date, country of filing, and application number of the above referenced application(s) when known.

by virtue of our agreements with Vertex Pharmaceuticals Incorporated, a corporation of Massachusetts whose post office address is 50 Northern Avenue, Boston, Massachusetts 02210, USA (hereinafter referred to as Assignee), confirm assignment and hereby assign to assignee the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to all applications for patents on this invention in all countries throughout the world, including any PCT International Application and all national stage applications based thereon that may be filed, and all patents issued upon such applications in all countries throughout the world;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignors, confirm that all rights in the inventions and applications listed above automatically transferred to Assignee by virtue of my/our agreements. For the avoidance of doubt, Assignors hereby confirm having sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, the above-referenced applications that disclose and/or claim this invention, any PCT International Application and all national stage applications based thereon that may be filed, any other applications for patents filed anywhere in the world that claim this invention, and all divisions, and continuations of any such application, and all patents which may be granted thereon, and all reissues thereof, and all rights to claim priority in any country on the basis of any such applications, and all extensions, renewals, and reissues thereof; and I/We hereby authorize and request that any official of any country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE covenant that have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, We have hereunto set our hands.

Upul Keerthi BANDARAGE

Date: 05/05/2020

Pedro GARCIA BARRANTES

Date: 19 - January - 2022

Cavan McKeon BLIGH

Date: MM-6-2020

Diane M. Boucher

Diane BOUCHER

Date: 6 May 2020

Michael John BOYD

Date: May 7, 2020

Michael Aaron BRODNEY

Date: Jan 6, 2022

Michael Philip CLARK

Date: May-5-2020

Veronique DAMAGNEZ

Date: 01.10.22

Lev Tyler DEWEY FANNING

Date: 11/24/2022

Robert Francis FIMOGNARI

Date: 5/8/20

Gabrielle Simone FLEMING

Date: 11/6/2022

Kevin James GAGNON

Date: 1/18/2022

Robert Giacometti

Robert GIACOMETTI

Date: 12 Jan 2022

Simon GIROUX

Date: 01/05/2022

Ronald Lee GREY Jr.

Date: 5/7/2020

Samantha GUIDO

Date: 05/05/2020

Amy Beth Hall

Amy Beth HALL

Date: January 10, 2022



Sarah Carol HOOD

Date: May 5, 2020

Dennis James HURLEY

Date: January 5th, 2022

Mac Arthur JOHNSON Jr.

Date: 12 May 2020

Peter JONES

Date: 13th January 2022

Sarathy KESAVAN

Date: 1/18/2022

Mei-Hsiu LAI

Date: 1/5/2022

Siying LIU

Date: 6 JAN 2022

Adam LOOKER

Date: January 5, 2022

Brad Maxwell

Brad MAXWELL

Date: 2020 May 05

John Patrick MAXWELL

Date: 12 MAY 2020

Ales MEDEK

Date: 07 MAY 2020

Philippe Marcel NUHANT

Date: 05/11/2020

Kirk Alan OVERHOFF

Date: 08 MAY 2020

Setu RODAY

Date: 14th Jan 2022

Stefanie ROEPER

Date: 05 May 2020

Steven M. RONKIN

Date: 1/6/2022

R. Sawant

Rupa SAWANT

Date: 06 May 2020

Yi SHI

Date: 05 Jan, 2022

Muna Shrestha

Muna SHRESTHA

Date: 05 May 2020

Marisa Sposato

Marisa SPOSATO

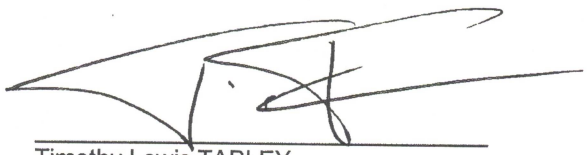
Date: 07 May 2020

Kathy STAVROPOULOS

Date: 06 MAY 2020

Rebecca Jane SWETT

Date: 5/7/20

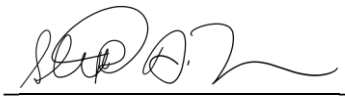


Timothy Lewis TAPLEY

Date: Jan 10, 2022

Qing TANG

Date: 5/7/2020



Stephen THOMSON

Date: 5/7/2020

Jinwang XU

Date: 5/5/2020

Mariam ZAKY

Date: 1/14/2022

ACKNOWLEDGEMENT OF ASSIGNEE



Name: Konstantinos Andrikopoulos
Title: Executive Director
On behalf of Vertex Pharmaceuticals Incorporated

02FEB2022

Date