

8433408



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**

November 20, 2023

**THIS IS TO CERTIFY THAT ANNEXED IS A TRUE COPY FROM THE
RECORDS OF THIS OFFICE OF A DOCUMENT RECORDED ON**

November 13, 2023

**By Authority of the
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office**



W. Montgomery
Wanda Montgomery
Certifying Officer

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT8273022

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ASTRAZENECA PHARMACEUTICALS LP	10/23/2023
RECEIVING PARTY DATA	
Name:	ASTRAZENECA UK LIMITED
Street Address:	1 FRANCIS CRICK AVENUE
Internal Address:	CAMBRIDGE BIOMEDICAL CAMPUS
City:	CAMBRIDGE
State/Country:	UNITED KINGDOM
Postal Code:	CB2 0AA
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	63386263
Application Number:	63497847
CORRESPONDENCE DATA	
Fax Number:	(301)398-9306
<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:	301-398-0000
Email:	patents@astrazeneca.com
Correspondent Name:	ASTRAZENECA MEDIMMUNE
Address Line 1:	ONE MEDIMMUNE WAY
Address Line 4:	GAITHERSBURG, MARYLAND 20878
ATTORNEY DOCKET NUMBER:	201256-USPSP-PSP2-ASSIGN3
NAME OF SUBMITTER:	MARA LOUEY
SIGNATURE:	/MARA LOUEY/
DATE SIGNED:	11/13/2023
Total Attachments: 2	
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ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

- (1) ASTRAZENECA PHARMACEUTICALS LP, a Delaware limited partnership under no. 2810992 with registered office address at 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437, United States of America ("Assignor"); and
- (2) ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under No. 3674842 with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignee").

WHEREAS, Assignor has agreed to assign to Assignee the Assignor's entire right, title and interest in and to US Provisional Application No. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application") and in and to the inventions and improvements disclosed in such Application.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignor, receipt of which is hereby acknowledged, the Assignor hereby assigns, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the inventions, the Application and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Application and any patents or applications derived therefrom; and the right to file patent applications derived from the Application directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the "Rights"), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignor acknowledges that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignor waives any right of first refusal that they may have for acquiring such Rights.

2. Assignor agrees with Assignee that their assignment to Assignee includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Rights, including all rights to recover damages, profits and injunctive relief for infringement of any of the Rights.

3. Assignor agrees with Assignee that they shall, at the expense of Assignee, execute and sign all such lawful instruments, applications and documents and do all such lawful acts and things as may reasonably be required by Assignee to enable Assignee or its successors, nominees or assigns to:

- a) secure the vesting of the Rights in Assignee or in its successors, nominees or assigns;
- b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and
- c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.

4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

Docket No. 201256-US-PSP
201256-US-PSP2

5. This assignment shall be governed by and construed in accordance with the laws of England and Wales and the parties hereby submit to the exclusive jurisdiction of the English courts.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.



Signed for and on behalf of

ASTRAZENECA PHARMACEUTICALS LP

Name: PATRICK SCOTT ALBAN

Title: Authorised Signatory

Date: OCTOBER 23, 2023

8433408



THE UNITED STATES OF AMERICA

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W. Montgomery
Wanda Montgomery
Certifying Officer



PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT8273135

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	ASTRAZENECA UK LIMITED	10/25/2023
RECEIVING PARTY DATA		
Name:	ASTRAZENECA AB	
Street Address:	SE-151 85	
City:	SODERTALJE	
State/Country:	SWEDEN	
PROPERTY NUMBERS Total: 2		
	Property Type	Number
	Application Number:	63386263
	Application Number:	63497847
CORRESPONDENCE DATA		
Fax Number:	(301)398-9306	
<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:	301-398-0000	
Email:	patents@astrazeneca.com	
Correspondent Name:	ASTRAZENECA MEDIMMUNE	
Address Line 1:	ONE MEDIMMUNE WAY	
Address Line 4:	GAITHERSBURG, MARYLAND 20878	
ATTORNEY DOCKET NUMBER:	201256US-PSPPSP2-ASSIGN4	
NAME OF SUBMITTER:	MARA LOUEY	
SIGNATURE:	/MARA LOUEY/	
DATE SIGNED:	11/13/2023	
Total Attachments: 2		
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source=2023-11-13 - 201256-US-PSP_PSP2 - Assignment 4 - AZUK to AZAB#page2.tif		

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

- (1) ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignor"); and
- (2) ASTRAZENECA AB, a company incorporated in Sweden under no. 556011-7482 with registered office address at SE-151 85 Södertälje, Sweden ("Assignee").

WHEREAS, Assignor has agreed to assign to Assignee the Assignor's legal right, legal title and legal interest in and to US Provisional Application Nos. 63/386,263 filed on December 6, 2022, and 63/497,847 filed on April 24, 2023 (the "Application") and in and to the inventions and improvements disclosed in such Application.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignor, receipt of which is hereby acknowledged, the Assignor hereby assigns, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely all their legal right, legal title and legal interest in and to the inventions, the Application and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Application and any patents or applications derived therefrom; and the right to file patent applications derived from the Application directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the "Rights"), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignor acknowledges that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignor waives any right of first refusal that they may have for acquiring such Rights.
2. Assignor agrees with Assignee that their assignment to Assignee includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Rights, including all rights to recover damages, profits and injunctive relief for infringement of any of the Rights.
3. Assignor agrees with Assignee that they shall, at the expense of Assignee, execute and sign all such lawful instruments, applications and documents and do all such lawful acts and things as may reasonably be required by Assignee to enable Assignee or its successors, nominees or assigns to:
 - a) secure the vesting of the Rights in Assignee or in its successors, nominees or assigns;
 - b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and
 - c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.
4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

Docket No. 201256-US-PSP
201256-US-PSP2

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Signed for and on behalf of
ASTRAZENECA UK LIMITED
Name: Andrew Cook
Title: Authorised Signatory

Date: 25 October 2023

RECORDED: 11/13/2023

PATENT
REEL: 065540 FRAME: 0857

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the 5th December 2023 (the “**Effective Date**”) by and between

ASTRAZENECA PHARMACEUTICALS LP, a Delaware limited partnership under no. 2810992, with registered office address at 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437, United States of America (“**Assignor**”); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom (“**Assignee**”).

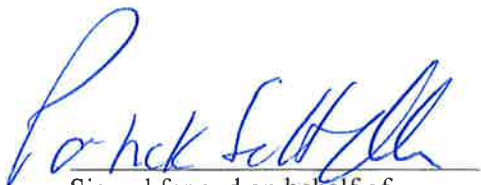
WHEREAS, Assignor has agreed to assign to Assignee the Assignor’s entire right, title and interest in and to the patent applications identified in the attached Schedule (the “**Applications**”) and in and to the inventions and improvements disclosed in such Applications.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignor, receipt of which is hereby acknowledged, the Assignor hereby assigns, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the inventions, the Applications and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Applications and any patents or applications derived therefrom; and the right to file patent applications derived from the Applications directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the “**Rights**”), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignor acknowledges that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignor waives any right of first refusal that they may have for acquiring such Rights.
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Signed for and on behalf of
ASTRAZENECA PHARMACEUTICALS LP

Name: *Patrick Scott Alban*

Title: Authorised Signatory

Date *12/17/2024*

Signed for and on behalf of
ASTRAZENECA UK LIMITED

Name:

Title: Authorised Signatory

Date _____

THE SCHEDULE

APPLICATIONS				
AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
201256-AR-NP	Argentina	National	P230103315	6 December 2023
201256-BS-NP	Bahamas	National		22 April 2024
201256-WO-PCT	International	PCT	PCT/IB2023/062262	5 December 2023
201256-LB-PCT	Lebanon	National	12955	6 December 2023
201256-PK-NP	Pakistan	National	902/2023	6 December 2023
201256-TW-NP	Taiwan	National	112147362	6 December 2023
201256-UY-NP	Uruguay	National	40548	6 December 2023
201256-US-NP	USA	National	18/529,426	5 December 2023

Priority Applications

AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
201256-US-PSP	USA	Provisional	63/386,263	6 December 2022
201256-US-PSP[2]	USA	Provisional	63/497,847	24 April 2023

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ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom (“Assignor”); and

ASTRAZENECA AB, a company incorporated in Sweden under no. 556011-7482, with registered office address at SE-151 85 Södertälje, Sweden (“Assignee”).

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Signed for and on behalf of
ASTRAZENECA UK LIMITED

Name: MARK NESS

Title: Authorised Signatory

Date 16 DECEMBER 2024



Signed for and on behalf of
ASTRAZENECA AB

Name: AULSON MCGHEE

Title: Authorised Signatory

Date 16 DEC 2024.

THE SCHEDULE

APPLICATIONS				
AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
201256-AR-NP	Argentina	National	P230103315	6 December 2023
201256-BS-NP	Bahamas	National		22 April 2024
201256-WO-PCT	International	PCT	PCT/IB2023/062262	5 December 2023
201256-LB-PCT	Lebanon	National	12955	6 December 2023
201256-PK-NP	Pakistan	National	902/2023	6 December 2023
201256-TW-NP	Taiwan	National	112147362	6 December 2023
201256-UY-NP	Uruguay	National	40548	6 December 2023
201256-US-NP	USA	National	18/529,426	5 December 2023

Priority Applications

AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
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201256-US-PSP[2]	USA	Provisional	63/497,847	24 April 2023

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M. Tarver
**Miguel Tarver
Certifying Officer**



PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT8272770

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
BERNARD BARLAAM	09/11/2023
MICHAEL BODNARCHUK	09/21/2023
GAIL WRIGLEY	09/20/2023
JON WINTER-HOLT	09/18/2023
OLIVER TURNER	09/21/2023
SOFIA FERRER CABRERA	09/06/2023
RECEIVING PARTY DATA	
Name:	ASTRAZENECA UK LIMITED
Street Address:	1 FRANCIS CRICK AVENUE
Internal Address:	CAMBRIDGE BIOMEDICAL CAMPUS
City:	CAMBRIDGE
State/Country:	UNITED KINGDOM
Postal Code:	CB2 0AA
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	63386263
Application Number:	63497847
CORRESPONDENCE DATA	
Fax Number:	(301)398-9306
<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:	301-398-0000
Email:	patents@astrazeneca.com
Correspondent Name:	ASTRAZENECA MEDIMMUNE
Address Line 1:	ONE MEDIMMUNE WAY
Address Line 4:	GAITHERSBURG, MARYLAND 20878
ATTORNEY DOCKET NUMBER:	201256-USPSP_PSP2-ASSIGN1
NAME OF SUBMITTER:	MARA LOUEY
SIGNATURE:	/MARA LOUEY/

DATE SIGNED:

11/13/2023

Total Attachments: 12

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source=2023-11-07 - 201256-US-PSP_PSP2 - Assignment 1 - Inventors to AZUK#page12.tif

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Bernard BARLAAM, Michael BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, and Sofia Ferrer CABRERA, all citizens of the United Kingdom, whose addresses are c/o of **ASTRAZENECA UK LIMITED**, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignors"); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignee")

WHEREAS

- A. Assignors have made certain inventions (the "Inventions") in respect of which US Provisional Application No. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application").
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Application.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignors, receipt of which is hereby acknowledged, the Assignors hereby confirm that they have assigned, and in so far as there may be any outstanding rights that have not been assigned to the Assignee do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the Inventions, the Application and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Application and any patents or applications derived therefrom; and the right to file patent applications derived from the Application directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the "Rights"), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignors warrant that the Rights are unencumbered. Assignors acknowledge that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignors waive any right of first refusal that they may have for acquiring such Rights.
2. Assignors each hereby agree with Assignee that their assignment to Assignee includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Rights, including all rights to recover damages, profits and injunctive relief for infringement of any of the Rights.
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 - b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and

- c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.

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Bernard Barlaam
Bernard BARLAAM

Date: 11th September 2023

Michael BODNARCHUK

Date: _____

Gail WRIGLEY

Date: _____

Jon WINTER-HOLT

Date: _____

Oliver TURNER

Date: _____

Sofia Ferrer CABRERA

Date: _____

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Bernard BARLAAM, Michael BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, and Sofia Ferrer CABRERA, all citizens of the United Kingdom, whose addresses are c/o of ASTRAZENECA UK LIMITED, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignors"); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignee")

WHEREAS

- A. Assignors have made certain inventions (the "Inventions") in respect of which US Provisional Application No. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application").
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Application.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignors, receipt of which is hereby acknowledged, the Assignors hereby confirm that they have assigned, and in so far as there may be any outstanding rights that have not been assigned to the Assignee do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the Inventions, the Application and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Application and any patents or applications derived therefrom; and the right to file patent applications derived from the Application directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the "Rights"), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignors warrant that the Rights are unencumbered. Assignors acknowledge that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignors waive any right of first refusal that they may have for acquiring such Rights.
2. Assignors each hereby agree with Assignee that their assignment to Assignee includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Rights, including all rights to recover damages, profits and injunctive relief for infringement of any of the Rights.
3. Assignors each hereby agree with Assignee that they shall, at the expense of Assignee, execute and sign all such lawful instruments, applications and documents and do all such lawful acts and things as may reasonably be required by Assignee to enable Assignee or its successors, nominees or assigns to:
 - a) secure the vesting of the Rights in Assignee or in its successors, nominees or assigns;
 - b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and

- c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.

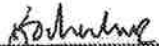
4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

5. This assignment shall be governed by and construed in accordance with the laws of England and Wales and the parties hereby submit to the exclusive jurisdiction of the courts of England and Wales.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.

Bernard BARLAAM

Date: _____



Michael BODNARCHUK

Date: 21/07/2023

Gail WRIGLEY

Date: _____

Jon WINTER-HOLT

Date: _____

Oliver TURNER

Date: _____

Sofia Ferrer CABRERA

Date: _____

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Bernard BARLAAM, Michael BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, and Sofia Ferrer CABRERA, all citizens of the United Kingdom, whose addresses are c/o of **ASTRAZENECA UK LIMITED**, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignors"); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignee")

WHEREAS

- A. Assignors have made certain inventions (the "Inventions") in respect of which US Provisional Application No. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application").
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Application.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

- 1. For good and valuable consideration made by Assignee to Assignors, receipt of which is hereby acknowledged, the Assignors hereby confirm that they have assigned, and in so far as there may be any outstanding rights that have not been assigned to the Assignee do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the Inventions, the Application and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Application and any patents or applications derived therefrom; and the right to file patent applications derived from the Application directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the "Rights"), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignors warrant that the Rights are unencumbered. Assignors acknowledge that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignors waive any right of first refusal that they may have for acquiring such Rights.
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Bernard BARLAAM

Date: _____

Michael BODNARCHUK

Date: _____

G. H. Wrigley

Gail WRIGLEY

Date: 20/09/2023

Jon WINTER-HOLT

Date: _____

Oliver TURNER

Date: _____

Sofia Ferrer CARRERA

Date: _____

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Bernard BARLAAM, Michael BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, and Sofia Ferrer CABRERA, all citizens of the United Kingdom, whose addresses are c/o of **ASTRAZENECA UK LIMITED**, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignors"); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignee")

WHEREAS

- A. Assignors have made certain inventions (the "Inventions") in respect of which US Provisional Application No. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application").
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NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

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Bernard BARLAAM

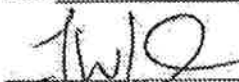
Date: _____

Michael BODNARCHUK

Date: _____

Gail WRIGLEY

Date: _____



Joel WINTER-HOLT

Date: 18-9-2023

Oliver TURNER

Date: _____

Sofia Ferrer CABRERA

Date: _____

ASSIGNMENT OF PATENT RIGHTS

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Bernard BARLAAM

Date: _____

Michael BODNARCHUK

Date: _____

Gail WRIGLEY

Date: _____

Jon WINTER-HOLT

Date: _____


Oliver TURNER

Date: 21/09/23

Sofia Ferrer CABRERA

Date: _____

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Sofia FERRER CABRERA SFC, 06/09/23

Bernard BARLAAM, Michael BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, and Sofia Ferrer CABRERA, all citizens of the United Kingdom, whose addresses are c/o of ASTRAZENECA UK LIMITED, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom ("Assignors"); and

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Bernard BARLAAM

Date: _____

Michael BODNARCHUK

Date: _____

Gail WRIGLEY

Date: _____

Jon WINTER-HOLT

Date: _____

Oliver TURNER

Date: _____

Sofia Ferrer CABRERA

Sofia FERRER CABRERA

SFC, 08/09/23

Date: 6th September 2023

8433408



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office**

November 20, 2023

**THIS IS TO CERTIFY THAT ANNEXED IS A TRUE COPY FROM THE
RECORDS OF THIS OFFICE OF A DOCUMENT RECORDED ON**

November 13, 2023

**By Authority of the
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office**

**Miguel Tarver
Certifying Officer**



PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT8272842

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ARIAMALA GOPALSAMY	09/11/2023
JASON SHIELDS	09/11/2023
RECEIVING PARTY DATA	
Name:	ASTRAZENECA PHARMACEUTICALS LP
Street Address:	1800 CONCORD PIKE
Internal Address:	P.O. BOX 15437
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19850-5437
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	63386263
Application Number:	63497847
CORRESPONDENCE DATA	
Fax Number:	(301)398-9306
<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:	301-398-0000
Email:	patents@astrazeneca.com
Correspondent Name:	ASTRAZENECA MEDIMMUNE
Address Line 1:	ONE MEDIMMUNE WAY
Address Line 4:	GAITHERSBURG, MARYLAND 20878
ATTORNEY DOCKET NUMBER:	201256-USPSP-PSP2-ASSIGN2
NAME OF SUBMITTER:	MARA LOUEY
SIGNATURE:	/MARA LOUEY/
DATE SIGNED:	11/13/2023
Total Attachments: 2	
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source=2023-11-13 - 201256-US-PSP_PSP2 - Assignment 2 - Inventors to AZPLP#page2.tif	

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the December 6, 2022 and April 24, 2023 (the "Effective Date") by and between

Ariamala GOPALSAMY and Jason SHIELDS, all citizens of the United States of America, whose addresses are c/o of **ASTRAZENECA PHARMACEUTICALS LP**, 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-543 ("Assignors"); and

ASTRAZENECA PHARMACEUTICALS LP, a Delaware limited partnership under no. 2810992, with registered office address at 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437, United States of America ("Assignee")

WHEREAS

- A. Assignors have made certain inventions (the "Inventions") in respect of which US Provisional Application Nos. 63/386,263 was filed December 6, 2022, and US Provisional Application No. 63/497,847 was filed on April 24, 2023 (the "Application").
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Application.

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4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

5. This assignment shall be governed by and construed in accordance with the laws of the State of Delaware and the parties hereby submit to the exclusive jurisdiction of the Delaware courts.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.


Ariamala GOPALSAMY

Date: 09/11/2023


Jason SHIELDS

Date: 9/11/23

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the 5th December 2023 (the “**Effective Date**”) by and between

Bernard Christophe BARLAAM, a French citizen, Michael Steven BODNARCHUK, Gail WRIGLEY, Jon WINTER-HOLT, Oliver TURNER, Helen Elizabeth JONES, all British citizens and Sofia FERRER CABRERA, a Spanish citizen, all of ASTRAZENECA UK LIMITED, 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom (“**Assignors**”); and

ASTRAZENECA UK LIMITED, a company incorporated in England and Wales under no. 3674842, with registered office address at 1 Francis Crick Avenue, Cambridge Biomedical Campus, Cambridge, CB2 0AA, United Kingdom (“**Assignee**”)

WHEREAS

- A. Assignors have made certain inventions (the “**Inventions**”) in respect of which the patent applications identified in the attached Schedule have been filed (the “**Applications**”).
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Applications.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignors, receipt of which is hereby acknowledged, the Assignors hereby confirm that they have assigned, and in so far as there may be any outstanding rights that have not been assigned to the Assignee do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the Inventions, the Applications and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Applications and any patents or applications derived therefrom; and the right to file patent applications derived from the Applications directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the “**Rights**”), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignors warrant that the Rights are unencumbered. Assignors acknowledge that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignors waive any right of first refusal that they may have for acquiring such Rights.
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 - b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and
 - c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.

4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

5. This assignment shall be governed by and construed in accordance with the laws of England and Wales and the parties hereby submit to the exclusive jurisdiction of the courts of England and Wales.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.

Bernard Christophe Barlaam
Bernard Christophe BARLAAM

Date 4 November 2024

Michael Steven BODNARCHUK

Date _____

Gail WRIGLEY

Date _____


Jon WINTER-HOLT

Date 4th NOV 2024

Oliver TURNER

Date _____

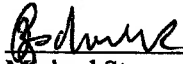
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Bernard Christophe BARLAAM

Date _____



Michael Steven BODNARCHUK

Date 12/11/2024

Gail WRIGLEY

Date _____

Jon WINTER-HOLT

Date _____

Oliver TURNER

Date _____

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Bernard Christophe BARLAAM

Date _____

Michael Steven BODNARCHUK

Date _____

GL Wrigley
Gail WRIGLEY

Date 05/11/24

Jon WINTER-HOLT

Date _____

Oliver TURNER

Date _____

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Bernard Christophe BARLAAM

Date _____

Michael Steven BODNARCHUK

Date _____

Gail WRIGLEY

Date _____

Jon WINTER-HOLT

Date _____



Oliver TURNER

Date 06/12/24


Sofia FERRER CABRERA

Date 7th November 2012

Helen Elizabeth JONES

Date _____

Signed for and on behalf of
ASTRAZENECA UK LIMITED

Name:

Title: Authorised Signatory

Date _____

Sofia FERRER CABRERA

Date _____

hejones

Helen Elizabeth JONES

Date 04/11/24



Signed for and on behalf of
ASTRAZENECA UK LIMITED
Name: MARK NESS
Title: Authorised Signatory

Date 16 DECEMBER 2024

THE SCHEDULE

APPLICATIONS				
AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
201256-AR-NP	Argentina	National	P230103315	6 December 2023
201256-BS-NP	Bahamas	National		22 April 2024
201256-WO-PCT	International	PCT	PCT/IB2023/062262	5 December 2023
201256-LB-PCT	Lebanon	National	12955	6 December 2023
201256-PK-NP	Pakistan	National	902/2023	6 December 2023
201256-TW-NP	Taiwan	National	112147362	6 December 2023
201256-UY-NP	Uruguay	National	40548	6 December 2023
201256-US-NP	USA	National	18/529,426	5 December 2023

Priority Applications

AstraZeneca Case No:	Country	Filing Type	Application No. and/or Title of Invention	Filing Date
201256-US-PSP	USA	Provisional	63/386,263	6 December 2022
201256-US-PSP[2]	USA	Provisional	63/497,847	24 April 2023

ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT is made as of the 5th December 2023 (the “**Effective Date**”) by and between

Ariamala GOPALSAMY and Jason SHIELDS, both US citizens of ASTRAZENECA PHARMACEUTICALS LP, 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437, United States of America (“**Assignors**”); and

ASTRAZENECA PHARMACEUTICALS LP, a Delaware limited partnership under no. 2810992, with registered office address at 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437, United States of America (“**Assignee**”)

WHEREAS

- A. Assignors have made certain inventions (the “**Inventions**”) in respect of which the patent applications identified in the attached Schedule have been filed (the “**Applications**”).
- B. Assignee wishes to secure the entire right, title and interest in and to the Inventions and to the Applications.

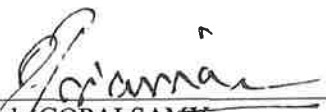
NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

1. For good and valuable consideration made by Assignee to Assignors, receipt of which is hereby acknowledged, the Assignors hereby confirm that they have assigned, and in so far as there may be any outstanding rights that have not been assigned to the Assignee do hereby assign, with full title guarantee, free from all and any charges or other third party rights, to Assignee absolutely their entire right, title and interest in and to the Inventions, the Applications and any patents or applications derived therefrom; any divisions, continuations and continuations-in-part thereof; any re-issues, re-examinations, or extensions thereof; all rights to claim priority on the basis of the Applications and any patents or applications derived therefrom; and the right to file patent applications derived from the Applications directly in the name of Assignee or an affiliated company of Assignee (in countries or regions where such filings are permissible) (collectively, the “**Rights**”), whether now existing or hereafter arising, to the full end of the term for which the Rights have been granted, reissued, re-examined or extended. Assignors warrant that the Rights are unencumbered. Assignors acknowledge that Assignee shall have the rights to further assign or otherwise transfer any or all of the Rights to any third party and Assignors waive any right of first refusal that they may have for acquiring such Rights.
2. Assignors each hereby agree with Assignee that their assignment to Assignee includes, but is not limited to, any and all causes of action, claims, demands or other rights, occasioned from or because of any and all past and future infringement of any of the Rights, including all rights to recover damages, profits and injunctive relief for infringement of any of the Rights.
3. Assignors each hereby agree with Assignee that they shall, at the expense of Assignee, execute and sign all such lawful instruments, applications and documents and do all such lawful acts and things as may reasonably be required by Assignee to enable Assignee or its successors, nominees or assigns to:
 - a) secure the vesting of the Rights in Assignee or in its successors, nominees or assigns;
 - b) defeat any challenge to the validity of and resolve any questions concerning the Rights; and
 - c) apply for, prosecute and obtain patent or similar protection in the United States and all other countries of the world for an invention embodied by the Rights, including the right to claim convention priority from such Patents and including, without limitation, cooperating in any proceedings involving examinations, re-examinations, reissues, opposition and cancellation proceedings, interferences, infringement proceedings, court actions and the like.

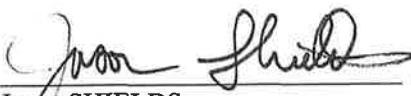
4. Assignor hereby authorizes the United States Commissioner of Patents and Trademarks and, as appropriate, the corresponding officials of other countries, to record this Assignment.

5. This assignment shall be governed by and construed in accordance with the laws of the State of Delaware and the parties hereby submit to the exclusive jurisdiction of the Delaware courts.

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.


Ariamala GOPALSAMY

Date 11/4/2024


Jason SHIELDS

Date 11/4/24



Signed for and on behalf of
ASTRAZENECA PHARMACEUTICALS LP

Name: Patrick Scott Alban

Title: Authorised Signatory

Date 11/4/2024

THE SCHEDULE

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