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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEAN ZHAO	05/23/2019
JOHANN BERGHOLZ	05/23/2019
GORDON J. FREEMAN	05/21/2019
THOMAS M. ROBERTS	05/23/2019

RECEIVING PARTY DATA

Name: DANA-FARBER CANCER INSTITUTE, INC.	
Street Address:	450 BROOKLINE AVENUE
City:	BOSTON
State/Country:	MASSACHUSETTS
Postal Code:	02215-5450

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16315298	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	DFS-16601
NAME OF SUBMITTER:	FAY GUARINO
SIGNATURE:	/Fay Guarino/
DATE SIGNED:	05/30/2019

Total Attachments: 6

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ASSIGNMENT

WHEREAS, we, Jean Zhao, Johann Bergholz, Gordon J. Freeman, and Thomas M. Roberts, have invented one or more inventions described in an application for Letters Patent of the United States, entitled METHODS FOR TREATING PTEN DEFICIENT EPITHELIAL CANCERS USING A COMBINATION OF ANTI-PI3KBETA AND ANTI-IMMUNE CHECKPOINT AGENTS the specification of which:

	is being exec	cuted herewith; and is about to be filed in the United States Patent Office;	·
[x]	was filed on	January 4, 2019 as U.S. Application No. 16/315298	
[x]	was filed on	July 11, 2017 as PCT Application No. PCT/US2017/041490	*
[x]	was filed on	July 11, 2016 as U.S. Application No. 62/360596	

WHEREAS, Dana-Farber Cancer Institute, Inc., (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of Massachusetts, having principal offices at 450 Brookline Avenue, Boston, Massachusetts 02215-5450, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of

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ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

Lamer -	ر <u>المحارك المحارك (Date)</u>
Jean Zhao	(Date)
Commonwealth of Massachusetts	
County of SIFFIK	
On this the <u>S()</u> day of <u>NYU</u> Jean Zhao, to me personally known, and known to assignment, and acknowledged the signing of sam	
Cotary Puni	100 Byot
My commission expires プリしょ202	2.
AMANDA BRYANT Notary Public (Conscionative or supplication)	

My Commission Expires

Attorney Docket No. DFS-16601 DFCI No. 2180,020

IN TESTIMONY WHEREOF, the undersigned has hereunto set his hand and seal on the date after his signature.

 $\frac{5/23/2019}{\text{(Date)}}$

Johann Bergholz

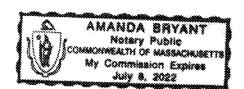
Commonwealth of Massachusetts

County of

On this the 23/6 day of 1004, 2019 before me personally appeared Johann Bergholz, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as his free act and deed.

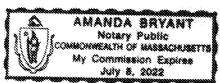
Notary Public

My commission expires July 8,2022



Attorney Docket No. DFS-16601 DFCI No. 2180.020

date after his signature.	Or, the undersigned has nereunto set his hand and seat on the
Am 11/1/1/2	•
Fhomas M. Roberts	(Date)
Commonwealth of Massachusetts) }
County of)
Thomas M. Roberts, to me persona	y of <u>17224</u> , 20 <i>19</i> before me personally appeared lly known, and known to me to be the person who signed the ledged the signing of same as his free act and deed.
	<u> Onorda Buad</u> Notary Public
My commission July 8,3	D22



ACKNOWLEDGEMENT OF ASSIGNEE:

I hereby ac Institute,	knowledge the foregoing executed Assignments.	ent on behalf of	f Dana-Farber Canc	er
By:	Aller (Serta)	Date:	2 9 MAY 2019	
Name:	Hilary J. Libka, J.D.			
Title:	Intellectual Property Counsel			

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