

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DIMITER S. DIMITROV	10/08/2018
ZHONGYU ZHU	09/27/2018
BRADLEY ST. CROIX	09/21/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES
<b>Street Address:</b>	NATIONAL INSTITUTES OF HEALTH
<b>Internal Address:</b>	6011 EXECUTIVE BLVD., STE. 325, MSC 7660
<b>City:</b>	BETHESDA
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	20892-7660
<b>PROPERTY NUMBERS Total: 3</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15317055
Application Number:	62009380
PCT Number:	US2015034949
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(212)541-4630
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<b>Correspondent Name:</b>	BRYAN CAVE LEIGHTON PAISNER LLP
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<b>ATTORNEY DOCKET NUMBER:</b>	C065272/0551508
<b>NAME OF SUBMITTER:</b>	KEVIN C. HOOPER, REG. NO. 40,402
<b>SIGNATURE:</b>	/Kevin C. Hooper/
<b>DATE SIGNED:</b>	10/16/2018
<b>Total Attachments: 5</b>	

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**ASSIGNMENT FOR NIH/FDA/CDC INVENTIONS AIA  
(NIH OR FDA OR CDC CO-INVENTORS ONLY)**

**WHEREAS**, we, Dimiter S. Dimitrov, Zhongyu Zhu, Bradley St. Croix, and Enrique Zudaire, as employees of the National Cancer Institute, an institute within the National Institutes of Health, a component of the United States Department of Health and Human Services having an address at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660, have made certain inventions as described and claimed in:

1. US Patent Application Serial No. 15/317,055, filed 12/7/2016, and which is entitled "Combination therapies using anti-metabolites and agents that target tumor-associated stroma or tumor cells";
2. PCT Application Serial No. PCT/US2015/034949, filed 6/9/2015, and which is entitled "Combination therapies using anti-metabolites and agents that target tumor-associated stroma or tumor cells"; and
3. US Provisional Application Serial No. 62/009,380, filed 6/9/2014, and which is entitled "Combination therapies using anti-metabolites and agents that target tumor-associated stroma or tumor cells"

all of which are collectively referred to as "**The Patent Application(s)**"

**WHEREAS**, we are the inventor(s) named in **The Patent Application(s)**; and

**WHEREAS**, the inventions described and claimed in **The Patent Application(s)** were made under conditions such as to entitle **THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services** [hereinafter **THE GOVERNMENT**] under Executive Order 10096 and its amendments, 35 USC §§200-201, §§206-207, and §210 and 37 CFR Part 501 to the entire right, title, and interest in such inventions; and

**WHEREAS, THE GOVERNMENT** is desirous of acquiring all domestic and foreign right, title, and interest in the inventions described and claimed in **The Patent Application(s)**; and

**NOW, THEREFORE**, having the legal obligation to assign our right, title and interest in the inventions described and claimed in **The Patent Application(s)** to **THE GOVERNMENT**, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, we hereby assign and transfer to **THE GOVERNMENT**:

the entire right, title, and interest in and to any and all inventions described and claimed in **The Patent Applications** and any and all Letters Patent(s) which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

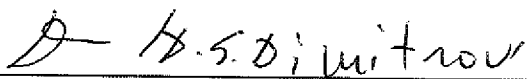


all rights to claim priority on the basis of **The Patent Application(s)** including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

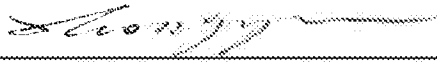
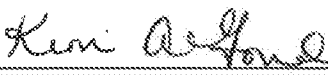
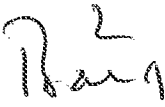
all applications for Letters Patent(s) that may be filed for any and all inventions described and claimed in **The Patent Application(s)** that may be filed in any foreign country and all Letters Patents that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and

any and all such Letters Patents as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would have been held by the inventors had this assignment not been made.

We further agree to make, execute, and deliver to **THE GOVERNMENT**, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist **THE GOVERNMENT** in every way as may be requested in protecting said invention.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor 1:	
<u>10/8/18</u> Date	<u></u> Dimiter S. Dimitrov
<u>10/8/18</u> Date	<u></u> Witness: <u>WGT LZ</u>
<u>10/8/18</u> Date	<u></u> Witness: <u>XIANG LZZ LZU</u>


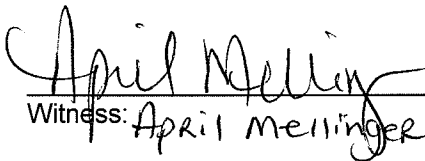

Inventor 2:	
<u>9/27/2018</u> Date	<u></u> Zhongyu Zhu
<u>9/27/2018</u> Date	<u></u> Witness:
<u>9/27/2018</u> Date	<u></u> Witness:

Inventor 3:	
<u>                    </u> Date	<u>Bradley St. Croix</u>
<u>                    </u> Date	<u>                    </u> Witness:
<u>                    </u> Date	<u>                    </u> Witness:

**Inventor 2:**

Date	Zhongyu Zhu
Date	Witness:
Date	Witness:

**Inventor 3:**

9/21/18 Date	 Bradley St. Croix
9/21/18 Date	 Witness: April Melling
9/21/18 Date	 Witness: Peter S. Hanson

<b>Inventor 4:</b>	
_____	_____
Date	Enrique Zudaire
_____	_____
Date	Witness:
_____	_____
Date	Witness: