

## ADDENDUM TO FINAL TECHNICAL REPORT

AWARD NUMBER: W81XWH-11-1-0422

TITLE: FYN is a Key Regulator of Metastasis in Prostate Cancer

PRINCIPAL INVESTIGATOR: Edwin Posadas

CONTRACTING ORGANIZATION: Cedars-Sinai Medical Center  
8700 Beverly Blvd.  
Los Angeles, CA 90048

REPORT DATE: 05/16/2019

TYPE OF REPORT: Addendum to Final Technical Report, Revised Section 6. "Products, Inventions, Patent Application and/or Licenses"

PREPARED FOR: U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;  
Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

# REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE 16/05/219			2. REPORT TYPE Addendum to Final Technical Report		3. DATES COVERED 15 May 2011 - 14 May 2015	
4. TITLE AND SUBTITLE  FYN is a Key Regulator of Metastasis in Prostate Cancer					5a. CONTRACT NUMBER W81XWH-11-1-0422	
					5b. GRANT NUMBER PC100368	
					5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)  Tseng, Hsian-Rong                      Ke, Zunfu                      Posadas, Edwin M. Huang, Jiaoti                      Li, Ker Chau                      Lu, Yi-Tseng Ho, Hao                      Chen, Jiefu                      Lichterman, Jake E-Mail:                      Chung, Leland WK                      Song, Min					5d. PROJECT NUMBER	
					5e. TASK NUMBER	
					5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Cedars-Siani Medical Center 8700 Beverly Blvd. Los Angeles, CA 90048					8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)  U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012					10. SPONSOR/MONITOR'S ACRONYM(S)	
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT  Approved for Public Release; Distribution Unlimited						
13. SUPPLEMENTARY NOTES						
14. ABSTRACT  FYN is a member of SRC-family of kinases that has been found to be particularly unregulated in aggressive prostate cancer. Early work in this study identified its role in promoting metastasis, but later work has highlighted the role of FYN in those cancers with neuroendocrine/neural differentiation- a phenomenon seen in treatment-induced small cell neuroendocrine cancers (tSCNC), a result of strong pressure on the AR-axis. Related to this behavior, we identified a subset of circulating tumor cells (CTCs) noted by particularly small nuclei (i.e. < 8.5 um) that suggest that this type of tSCNC biology and thus clinical behavior (visceral metastasis) is at hand. Due to its high levels of FYN expression in lymphocytes, FYN expression could not be well characterized on the CTCs. Newer efforts will now focus on detecting molecular pathways downstream of FYN to better characterize this circulating biomarker which may better identify patients who would benefit from FYN inhibition as part of a therapeutic strategy.						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC	
Unclassified	Unclassified	Unclassified	Unclassified	3	19b. TELEPHONE NUMBER (include area code)	

## ADDENDUM TO FINAL TECHNICAL REPORT

### Revised Section 6. PRODUCT

#### Inventions, patent applications, and/or licenses\*

*Identify inventions, patent applications with date, and/or licenses that have resulted from the research. State whether an application is provisional or non-provisional and indicate the application number. \**

(The above instruction is taken from the language in Section 6 of the reporting requirements.)

##### Invention # 1:

Very-Small-Nuclear Circulating Tumor Cell (vsnCTC) as a Diagnostic Biomarker of Visceral Metastasis  
in Advanced Prostate Cancer

62/056,321

PCT/US2015/052736

##### Invention #2:

Method of Accessing Disease Condition of Cancer

15/514,438

\*The paragraph in your award entitled "Patents and Inventions Reporting Requirements" requires you to submit a final DD Form 882, "Report of Inventions and Subcontracts " and file invention disclosures and patent applications using the Interagency Edison (iEdison) system through the National Institutes of Health. Do not include the form or copy of the iEdison report in this addendum. Submit as instructed in the paragraph.