

*e-ASIA Joint Research Program  
Progress Report*

1. Project Title:

Precision treatment for inflammation/infection-related cholangiocarcinoma

2. Joint Research Period: June 1<sup>st</sup>, 2019 ~ May 31<sup>st</sup>, 2022

3. Principal Investigators:

- Country 1: Siwanon Jirawatnotai, Ph.D., Associate Professor, Siriraj Center of Excellence for Systems Pharmacology, and Department of Pharmacology, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand
  - Planned Funding Period: Month, Day, Year – Month, Day, Year
- Country 2: Name, Seiji Okada, MD., Ph.D., Professor, Division of Hematopoiesis, Joint Research Center for Human Retrovirus Infection, Kumamoto University, 2-2-1, Honjo, Kumamoto, 860-0811, Japan
  - Planned Funding Period: Month, Day, Year – Month, Day, Year
- Country 3: Piotr Sicinski, MD., Ph.D., Professor, Department of Cancer Biology, Dana-Farber Cancer Institute, Harvard Medical School, Boston, USA
  - Planned Funding Period: Month, Day, Year – Month, Day, Year

4. Summary of the Progress of the Joint Research:

Up until now (1.5-year, half of the project period), the project has produced a number of the unique cholangiocarcinoma patient-derived xenograft, and organoid models. Some of which has been demonstrated to be a powerful model for drug testing. At the moment the project produced two high-impact original publications, and a review paper.

We are proceeding our remaining time to build more PDX and organoid models, and to complete the characterization of the models. To be cautious of the COVID-19 situation worldwide, we have adapted part of the project to be more self-sufficient.

5. Scientific Achievements and Implemented Activities (Research Exchange, Workshop, Publication, etc. if any):

*\*For this item, please fill in the attached Excel file.*

6. Future Goals and Plan of Activities within and after the project period:

We are proceeding our remaining time to build more PDX and organoid models, and to complete the characterization of the models. The characterization composes of, exome sequencing, transcriptome sequencing, and part of the PDX will be studied using Nano-string technology. We are trying to connect with

some of the cancer depositories in order to find the way to share our resource in the standard way. This effort will be continued even after the project period.

7. Recommendations and Comments to the Program (if any):  
(ex. Any support to request from the Program in order to achieve item 6.)

During this special circumstance of COVID-19 pandemic, we hope for the flexibility from the program in order to keep work going. Activities that include traveling may need to be adapted. To this end, in practical we might need to modify the budget allocation, from time to time in order to accommodate the needs of our partners, and our team.

# Lists of Achievements and Implemented Activities

## 1. Original Publication of Articles etc.

**[Notes]**

Please fill in **only the achievements of this project** by country in order of publication date. Only “published” is targeted, but please write “in press” too only for Final Report.  
 Please count Proceedings with peer review as original paper.  
 The information on this form is only disclosable. Please submit Non-disclosable information in a separate file.

### 1.1 Original Publications (Articles co-authored among Research Teams)

All Authors' Names, Title, Journal Name, Volume, Edition, Page, Year of Publication	DOI Code	Publication Status	Remarks (e.g. publication in top level journals etc.)
Dependency of Cholangiocarcinoma on Cyclin D-Dependent Kinase Activity	DOI: 10.1002/hep.30704	published	Published in the top journal of the hepatology field
Establishment of a Patient-Derived Tumor Xenograft Model and Application for Precision Cancer Medicine	DOI: 10.1248/cpb.c17-00789	published	
Application of Highly Immunocompromised Mice for the Establishment of Patient-Derived Xenograft (PDX) Models	DOI: 10.3390/cells8080889	published	

3 Total

### 1.2 Original Publications (Articles by Single Team only)

All Authors' Names, Title, Journal Name, Volume, Edition, Page, Year of Publication	DOI Code	Publication Status	Remarks (e.g. publication in top level journals etc.)	Country name of the team
Taro Kagaku and Jiro Kagaku, Distinct roles of MLCK and ROCK in the regulation of membrane protrusions and focal adhesion dynamics during cell migration of fibroblasts. J Cell Biol. 2015 Feb 2;164(3):427-39.	doi: 10.1083/jcb.201506117	in press		Thailand

0 Total

## Lists of Achievements and Implemented Activities

### 2. presentations at Academic Conferences etc. (Seminars, Workshops, Symposia)

**【Notes】**

Please fill in **only the achievements of this project** by country in order of presentation date.  
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#### 2. 1 Conference Presentations (Joint Presentations among Research Teams)

Date	Type of Presentation	Speaker, "Title", Conference Name, Location, etc.
December 2, 2019	Guest/Invited Speaker	2nd Double Degree memorial symposium at Siriraj hospital, Mahidol University, All of the P.I are invited as speakers, Peter Sicinski, Seiji Okada, Kulthida Vaeteewoottacharn, Siwanon Jirawatnotai, and Somponnat Sampattavanich
September 9, 2019	Oral Presentation	The 78th Annual Meeting of the Japanese Cancer Association, Our team presented 5 oral presentations, Siwanon Jirawatnotai, Seiji Okada, Kulthida Vaeteewoottacharn, Orawan Suppramote, and Somponnat Sampattavanich
May 4-5, 2019	Guest/Invited Speaker	Japan Agency for Medical Research and Development (AMED), Asia Pacific Scientific workshop, Singapore, our team presented as invited speakers, Kulthida Vaeteewoottacharn, Seiji Okada, and Siwanon Jirawatnotai

14 Total

## 2. 2 Conference Presentations (by Single Team)

Date	Type of Presentation	Speaker, "Title", Conference Name, Location etc.	Country name of the team

0 Total

## Lists of Achievements and Implemented Activities

### 3. Workshops, Seminars, Symposia and Other Events (Organized by the Project)

**【Notes】**

Please fill in **only the achievements of this project** in order of event date.

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Event duration	Name of Organizer	Title of the Event	Location (Country, City, Venue)	Number of Participants (Including Team Members)	Overview
Mar 4–5, 2019	Japan Agency for Medical Research and Development (AMED), Asia Pacific Scientific workshop, Singapore	Asia Pacific Scientific workshop, Singapore, our team presented as invited speakers, Kulthida Vaeteewootacharn, Seiji Okada, and Siwanon Jirawatnotai	Singapore	More than 100	The workshop and seminar was to further collaboration in medical research. The event was kicked started as an effort after the signing of AMED and Australia's National Health and Medical Research Council (NHMRC) in October of 2019.

1 Total

# Lists of Achievements and Implemented Activities

## 4. Record of Research Exchanges

**[Notes]**  
 Please fill in the record of **research exchange only of this project**.  
 "Duration of exchange" is not the number of days stayed on the site, but the number of days from departure to return home.  
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Date of Departure	Date of Return	Last Name & First Name	Country of Affiliation	Affiliation	Position	Exchange Destination (Country, City, Research Organization etc)	Description of Exchange Content/Purpose	Duration of Exchange (autocompleted)
January 1, 2020	Still active	Charupong Saengboonmee	Thailand	Khon Kaen University	Postdoc	Dana-Farber Cancer Institute	To conduct experiments	3 years
								0
								0

Total (Person)

Total (Person-day)

# Lists of Achievements and Implemented Activities

## 5. Patent Applications

**[Notes]**

Please fill in **only the achievements of this project** by country in order of presentation date.  
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### 5.1 Independent Applications by Single Team

Application Number	Name of Patent/Patent Name	Application Date	Patent Applicants (Fill in All Members)	Publication Number (leave blank if unpublished)	Inventor	Country of Application	Registration Number (leave blank if unregistered)	Country Name of the Team

Total (Number of Application)

Total (Number of Registration)

### 5.2 Joint Applications

Application Number	Name of Patent/Patent Name	Application Date	Patent Applicants (Fill in All Members)	Publication Number (leave blank if unpublished)	Inventor	Country of Application	Registration Number (leave blank if unregistered)

Total (Number of Application)

Total (Number of Registration)



## Lists of Achievements and Implemented Activities

### 6. Awards

**[Notes]**

Please fill in **only the achievements of this project** by country in order of date of Award.  
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Date of Award	Name of Award	Recipient	Remarks	Country Name of the Team
March 4, 2019	The 78th Annual Meeting of the Japanese Cancer Association, Travel award was given to 4 of our members, Kulthida Vaeteewootacharn, somponnat Sampattavanich, Orawan Suppramote, Siwanon Jirawatnotai	Kulthida Vaeteewootacharn		Thailand
		somponnat Sampattavanich		
		Orawan Suppramote		
		Siwanon Jirawatnotai		

0 Total

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