

*e-ASIA Joint Research Program
Progress Report*

1. Project Title: Surveillance of specific cancer incidence and mortality in South East Asia, by developing a standard population-based cancer registry system.

2. Joint Research Period: 11/1/2017~3/31/2021

3. Principal Investigators:

- Japan: Tomohiro Matsuda, Section Head, National Cancer Center
 - Planned Funding Period: 7/1/2017~3/31/2021
- Cambodia: Hav Monirath, Head of Department, Calmette Hospital
 - Planned Funding Period: In-kind support only
- Philippines: Rica Mirasol Lumague, Chief of Medical Professional Staff II, Rizal Cancer Center
 - Planned Funding Period: In-kind support only
- Viet Nam: Tran Thi Thanh Huong, Deputy Director of National Cancer Institute, K3 Hospital
 - Planned Funding Period: In-kind support only

4. Summary of the Progress of the Joint Research:

This collaborative research aims to conduct an assessment of cancer registration status and methods in order to develop training sessions, and to quantify the specific cancers in Asia and related risk factors. The overall goal of the project is to support the development of registry activity via networks in South East Asia.

We comply with “Cancer Registration: Principles and Methods” (IARC Scientific Publication No. 95) and “Planning and Developing Population-Based Cancer Registration in Low- and Middle-Income Settings” (IARC Technical Publication No. 43) and developed training materials and standardized training programs. The programs cover the basics of cancer registries, cancer registry coding, cancer epidemiology, cancer registry accuracy management, safety management measures, the use of cancer registries for cancer control, etc.. They were organized in the form of powerpoint slides and accompanying materials were prepared. Utilizing these materials, we co-organized with NCC Korea a workshop in March 2018 in Indonesia and a group training on cancer registration, cancer statistics and cancer control at the Dharmais Cancer Center located in Jakarta.

In the second year, standardized trainings on cancer registration were planned and implemented using the training materials created in the first year. Basic courses include: Introduction to Cancer, Introduction to Epidemiology, Introduction to Cancer Registry, Basics of Cancer Registry, Hospital Information System and Collecting Information from Medical Records, Coding with ICD-O-3, UICC-TNM and IARC/ Staging by IACR Summary Stage, Determination of

Multiple Cancers, and Development of IARC Cancer Registration by CanReg5 were proposed for inclusion in the training program. In Cambodia, we conducted a beginner's course in September, 2018. The collective training was conducted. In Vietnam, in collaboration with China NCC, Hanoi K3 Hospital in September, 2018. We conducted a beginner's course. Also, in March 2019, at the same Hanoi K3 Hospital, co-sponsored by China NCC following the standard operating procedure (SOP) in Cancer Registry, On-job training was conducted.

Through these training activities, the quantitative and qualitative accuracy of population-based cancer registry data in both Cambodia and Vietnam were improved and the operation of the registries were standardized.

Using the training materials developed in the 1st year, we planned and implemented standardized training courses on cancer registration. The basic course includes: Introduction to Cancer, Introduction to Epidemiology, Introduction to Cancer Registry, Basics of Cancer Registry, Hospital Information System and Collecting Information from Medical Records, Coding with ICD-O-3, Staging with UICC-TNM and IACR summary stage, Determination of Multiple Primaries, and IARC CanReg5 Registration (25 hours). The intermediate course includes: Cancer Registry Operations Overview, Staging, Site-specific Data Summaries, Coding exercise, Cancer Information Consolidation, Analysis of Data (descriptive epidemiology and analytical epidemiology), Cancer Registry Data for Cancer Control, Cancer Registries and Clinical Epidemiology, and the Cancer Registry in the World (25 hours). We proposed these two courses as training programs to IARC. Common training materials by cancer site (head and neck, stomach, colon, liver, lung, breast, and (cervix, prostate, and bladder) were developed. In addition to the regular training, Peer Review Program (reviewing business operations with other registry office practitioners to improve efficiency) based on the program used in Japan was tested in October 2019, at the Yangon Cancer Registry (Myanmar). In addition, we translated the checklist for personal information protection used by the Japanese Cancer Registry. Such training materials were circulated to IARC, as well.

As for the field training, the Japanese research team visited Vietnam in September, 2019. We conducted the proposed intermediate course as a group training. After the training, we visited the Ho Chi Minh Oncology Hospital and observed the status of the local cancer registries. In Vietnam, data from two registries, Hanoi and Ho Chi Minh City, were used to estimate the incidence of cancer and published in a scientific journal. In Cambodia, we planned to implement similar intermediate training programs, but finally did not realize at the Calmette Hospital. The course was postponed to the following year. In order to develop cancer statistics for the surrounding region, the basic course was held instead at the Vientiane National Cancer Center (Laos) in February, 2020.

Through these training activities, the quantitative and qualitative aspects of cancer registry data from the population-based cancer registries of both Cambodia and Vietnam have been improved and supported by Japan and Philippines cancer registries. The accuracy of the registration process has been improved and the operation of the registration process has been standardized.

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:

Even after the study period, high-precision cancer registries have not been achieved in the partner countries. We will continue to support these countries in cooperation with IARC and other leading cancer registry countries such as China, Korea and Thailand. In addition, no reliable cancer statistics have been established outside of the partner countries of this e-Asia project. The programs and teaching materials developed in this project are also available to other countries (Laos, Indonesia, Myanmar, Bhutan, etc.). The goal is to realize a coordinated approach to cancer control in the Asian region as a whole by providing support through the use of the training program and the educational materials.

7. Recommendations and Comments to the Program (if any):

(ex. Any support to request from the Program in order to achieve item 6.)

The researcher-to-researcher match event held in Singapore in 2018 was very useful. Cancer control involves a series of measures, from understanding the current situation through cancer statistics to prevention, early detection, treatment, and care coverage. These disciplines must work together, not be stove-piped of events that would include researchers after their research period and promote collaboration between these disciplines. We expect it to be held.

Lists of Achievements and Implemented Activities

1. Original Publication of Articles etc.

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.)
Laureline Gatellier, Tomohiro Matsuda, Kanaga Sabapathy, Min Dai, Luh Komang Mela Dewi, Tran Thanh Huong, Kardinah Kardinah, Tran Van Thuan, Jong Bae Park, Jie He, Erdenekhuu Nansalmaa, Bayarsaikhan Luvsandorj, William Ying Khee Hwang, Manju Sengar, CS Pramesh, Tatsuya Suzuki, An Asian Body to Tackle Cancers in Asia – The Asian National Cancer Centers Alliance, Asian Pacific Journal of Cancer Prevention, 21(5):1207–1212, 2020	10.31557/APJCP.2020.21.5.1207	published	
Eva Steliarova-Foucher, Murielle Colombet, Lynn A G Ries, Florencia Moreno, Anastasia Dolya, Freddie Bray, Peter Hesselting, Hee Young Shin, Charles A Stiller, and IICC-3 contributors, International Incidence of Childhood Cancer, 2001–10: A Population-Based Registry Study, Lancet Oncol. 18(6):719–731, 2017	10.1016/S1470-2045(17)30186-9	published	IARC's leading project

2 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
Sang Minh Nguyen, Stephen Deppen, Giang Huong Nguyen, Dung Xuan Pham, Tung Duc Bui and Thuan Van Tran, Projecting Cancer Incidence for 2025 in the 2 Largest Populated Cities in Vietnam, Cancer Control, Volume 26: 1–13, 2019	10.1177/1073274819865274	published		Viet Nam
Tung Pham, Linh Bui, Giang Kim, Dong Hoang, Thuan Tran and Minh Hoang, Cancers in Vietnam—Burden and Control Efforts: A Narrative Scoping Review, Cancer Control, Volume 26: 1–14, 2019	10.1177/1073274819863802	published		Viet Nam
松田智大, なぜアジア地域でのがん医療研究連携が喫緊の課題か, 日本医事新報, No.5000, P.67, 2020		published	in Japanese	Japan
松田智大, アジア地域でのがん医療連携を, 日本経済新聞, 1/15, 2020		published	Newspaper article	Japan

4 Total

Lists of Achievements and Implemented Activities

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

2. 1 Conference Presentations (Joint Presentations among Research Teams)

Date	Type of Presentation	Speaker, "Title", Conference Name, Location, etc.

0 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)

Event duration	Name of Organizer	Title of the Event	Location (Country, City, Venue)	Number of Participants (Including Team Members)	Overview
March 8–10, 2018	Tomohiro Matsuda	Workshop on Cancer Registration (Beginner)	Indonesia, Jakarta, Dharmais Cancer Center	60	We co-organized with the Korean NCC to hold a workshop on cancer registration and Group training on cancer registration, cancer statistics, and cancer control, and coding exercise at the Dharmais Cancer Center in Jakarta.
September 5–7, 2018	Tomohiro Matsuda	Workshop on Cancer Registration (Beginner)	Cambodia, Phnom Penh, Calmette Hospital	100	In Cambodia, we conducted a beginner's course on cancer registration at Calmette Cancer Hospital, co-sponsored by Philippines co-investigator and Thailand CC.
September 18–20, 2018	Tomohiro Matsuda	Workshop on Cancer Registration (Beginner)	Viet Nam, Hanoi, K3 Hospital	30	In Vietnam, in collaboration with Philippines co-investigator and China CC, a Hanoi K3 Hospital, we conducted a beginner's course on cancer registration.
March 25–29, 2019	Tomohiro Matsuda	Follow-up Training Course	Viet Nam, Hanoi, K3 Hospital	10	On-job training was conducted to introduce the standard operation procedure of cancer registration.
October 10–11, 2019	Tomohiro Matsuda	Workshop on Cancer Registration (Data Quality Check)	Myanmar, Yangon, Yangon General Hospital	50	In Yangon Cancer Registry(Myanmar), we conducted the standard quality check program of the data, and checked their security by using the checklist for personal information protection used by the Japanese Association of Cancer Registries.
September 16–17, 2019	Tomohiro Matsuda	Workshop on Cancer Registration (Intermediate)	Viet Nam, Hanoi, K3 Hospital, Ho Chi Minh, General Oncology Hospital	20	We conducted an intermediate course as a group training. After the training, we visited the Ho Chi Minh Oncology Hospital and observed the status of the local cancer registries.
February 28, 2020	Tomohiro Matsuda	Workshop on Cancer Registration (Beginner)	Laos, Vientiane, Vientiane National Cancer Center	30	We conducted the established beginner's course at the Vientiane National Cancer Center (Laos).

7 Total

Lists of Achievements and Implemented Activities

4. Record of Research Exchanges

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)
March 8, 2018	March 10, 2018	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Indonesia, Jakarta, Dharmais Cancer Center	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Tatsuya Suzuki	Japan	National Cancer Center	Section Head	Indonesia, Jakarta, Dharmais Cancer Center	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Kayo Nakata	Japan	Osaka International Cancer Center	Deputy Chief	Indonesia, Jakarta, Dharmais Cancer Center	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Hiroko Nakagawa	Japan	Aichi Cancer Center	Researcher	Indonesia, Jakarta, Dharmais Cancer Center	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Young-Joo Won	Korea	National Cancer Center	Division Chief	Indonesia, Jakarta, Dharmais Cancer Center	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Cambodia, Phnom Penh, Calmette Hospital	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Kumiko Saika	Japan	National Cancer Center	Researcher	Cambodia, Phnom Penh, Calmette Hospital	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Vicki Medina	Philippines	Rizal Cancer Center	Researcher	Cambodia, Phnom Penh, Calmette Hospital	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Donsuk Pongnikorn	Thailand	Lampang Cancer Hospital	Medical Doctor	Cambodia, Phnom Penh, Calmette Hospital	Training workshop and meeting with the co-investigators.	3
September 5, 2018	September 7, 2018	Vicki Medina	Philippines	Rizal Cancer Center	Researcher	Cambodia, Phnom Penh, Calmette Hospital	Training workshop and meeting with the co-investigators.	3
September 18, 2018	September 20, 2018	Tomotaka Sobue	Japan	Osaka University	Professor	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3
September 18, 2018	September 20, 2018	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3
September 18, 2018	September 20, 2018	Kumiko Saika	Japan	National Cancer Center	Researcher	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3
September 18, 2018	September 20, 2018	Hongmei Zeng	China	National Cancer Center	Researcher	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3
September 18, 2018	September 20, 2018	Rongshou Zheng	China	National Cancer Center	Researcher	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3

September 18, 2018	September 20, 2018	Rica Mirasol Lumague	Philippines	Rizal Cancer Center	Medical Doctor	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	3
October 10, 2018	October 11, 2018	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Myanmar, Yangon, Yangon General Hospital/ Naypyidaw, Naypyidaw General Hospital	Training workshop and meeting with the co-investigators.	2
October 10, 2018	October 11, 2018	Erica Nakao	Japan	National Cancer Center	Research Assistant	Myanmar, Yangon, Yangon General Hospital/ Naypyidaw, Naypyidaw General Hospital	Training workshop and meeting with the co-investigators.	2
March 25, 2019	March 29, 2019	Kayo Nakata	Japan	Osaka International Cancer Center	Deputy Chief	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	5
March 25, 2019	March 29, 2019	Sumiyo Okawa	Japan	Osaka International Cancer Center	Researcher	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	5
March 25, 2019	March 29, 2019	Masako Sato	Japan	Akita Foundation for Health Care	Cancer Registrar	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	5
March 25, 2019	March 29, 2019	Rongshou Zheng	China	National Cancer Center	Researcher	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	5
September 16, 2019	September 17, 2019	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Viet Nam, Hanoi, K3 Hospital	Training workshop and meeting with the co-investigators.	2
February 28, 2020	February 28, 2020	Tomohiro Matsuda	Japan	National Cancer Center	Section Head	Laos, Vientiane, Vientiane National Cancer Center	Training workshop and meeting with the co-investigators.	1
February 28, 2020	February 28, 2020	Sumiyo Okawa	Japan	Osaka International Cancer Center	Section Head	Laos, Vientiane, Vientiane National Cancer Center	Training workshop and meeting with the co-investigators.	1

Total (Person) 18

Total (Person-day) 76

Lists of Achievements and Implemented Activities

5. Patent Applications

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

Date of Award	Name of Award	Recipient	Remarks	Country Name of the Team

Total