

Strengthening Clinical Application of Hypofractionated Radiotherapy

RAS6100

2022-2025

Lead Country: *Republic of Korea*

Lead Country Coordinator: *Won Il Jang*

Progress Report for 2023

Presented to the 46th Regional Meeting of the RCA NRs

Project Objective and Outcome

- Objective
 - To enhance cancer treatment in the RCA region through the application of hypofractionated radiotherapy
- Outcome
 - The project was significantly implementing the formation of the national project team, and hosting/participating the First Coordination Meeting(Q1 2022) as well as submitting the NPC's progress reports. The LCC country hosted the 1st Regional Training Course in Republic of Korea by virtually at Q4 2022 and supported for hosting the 2nd Regional Training Course in Pakistan at Q4 2023.

Project Description

- This project provides strengthen cancer management programs in Member States (MSs), including training of radiation oncologists, medical physicists, and technologists
- It aims to strengthen the application of hypofractionated radiotherapy in the RCA region through a comprehensive approach, including the clinical aspect and the medical physics aspect of the whole treatment process.
- It will also focus on evidence based hypofractionated treatments, not necessarily SBRT, to be able to provide treatment for a broader range of applications, such as breast, prostate, etc.

Regional Activities Implemented during current year

No.	Activity	Scheduled for	Host Period	Output
1	First Coordination Meeting	Q1 2022	Q1 2022	First coordination meeting was held virtually by ROK
2	1 st RTC for national trainers of radiation oncologists and medical physicists	Q3 2022	Q4 2022	Virtual regional training course on basic science and clinical applications of hypofractionated radiotherapy was held virtually by ROK
3	2 nd RTC on mild to moderate HFRT: Basics to clinical application for curative treatment of malignancies	Q4 2023	October Q4 2023	Regional training course on basics to clinical application for curative treatment of malignancies will be implement in Pakistan Lahore.
4	Expert Mission to strengthen clinical application of HFRT (Vietnam)	-	May Q2 2023	Strengthen the clinical application of HFRT in rectal, prostate and breast cancer in Vietnam and quality audit/dosimetry technology.

Status of achievement of Project Outputs

Output	Indicator and Target	Status of Achievement
Output 1 Project management team operational	<ol style="list-style-type: none"> 1. Number of GPs that have established a project management structure by 4Q 2022 2. 21 GPs that have prepared national work plans 	18 GPs appointed National Project Teams and prepared National Work Plans
Output 2 Professionals trained in hypofractionated radiotherapy at regional and national level	<ol style="list-style-type: none"> 1. Radiation oncologists, medical physicists, and radiation therapists trained on regional training course and functional as national trainers by 4Q 2025. 2. 21 national training activities by 4Q 2025. 	The 1 st RTC was successfully held virtually via MS Teams supported by the IAEA. Training materials were properly prepared and lectures were recruited through IAEA and host institution (KIRAMS). Total 35 professionals attended the 1 st RTC.
Output 3 Safety and quality of hypofractionated radiotherapy improved	<ol style="list-style-type: none"> 1. A package of practical information provided to implement hypofractionated radiotherapy by 4Q 2025. 2. Implementation of QA/QC programs in counterpart institutions for hypofractionated radiotherapy by 4Q 2025. 3. Collecting, sharing and distributing information on hypofractionated radiotherapy by using established IT resources by 4Q 2025. 	Baseline information for a package of practical information and QA/QC program was collected from the NPC of MSs through survey. In addition, we used the remaining budget for procurement of necessary items in support of HFRT.

National Activities (Target GPs) 1

Participating GP	Submission of six- monthly progress reports	Adoption of National Work Plans	Progress of implementation of national work plans	Comments
Australia	Yes			
Bangladesh	Yes			
Cambodia	No			
China	Yes	Yes	Satisfactory/on target	
India	Yes			
Indonesia	Yes	Yes	On target	1 event in 2023 completed. IROS scientific meeting on 3-4 Feb 2023.
Japan	Yes	Yes	Good/on target	
Korea, Republic of	Yes	Yes	Good/on target	
Lao P.D.R.	Yes			
Malaysia	Yes			

National Activities (Target GPs) 2

Participating GP	Submission of six-monthly progress reports	Adoption of National Work Plans	Progress of implementation of national work plans	Comments
Mongolia	Yes	Yes	On target	June 2022 IMRT/VMAT was introduced which can facilitate to do more HFRT.
Myanmar	Yes			
Nepal	Yes			
New Zealand	Yes			
Pakistan	Yes	Yes	Satisfactory	2 nd RTC for RO and MP in Q4 2023 is ready for implement.
Palau	Yes			
Philippines	Yes			
Singapore	No			
Sri Lanka	No			
Thailand	Yes	Yes	Good	
Vietnam	Yes			

Resources Provided (Resource GPs)

Participating GP	Expert services	Laboratory services	Hosting of RTCs	Comments
Republic of Korea(Host), Bangladesh, Cambodia, India, Indonesia, Japan, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippine, Singapore, Thailand, Vietnam	10 lecturers supported by KIRAMS	Virtual regional training course and provided e-learning modules	From 14 th to 17 th March 2022	N/A
On progress	On progress	In person Regional Training Course	From 23 rd to 27 th October 2023 by Pakistan	Will be implemented

Notable Project Achievements during Current Year

- Attend Radiation Oncology meeting at Tran Hung Dao Hospital
- Dr. Won Il Jang speak in the plenary session with the topic as stereotactic Body Radiotherapy for HepatoCellular Carcinoma
- Dr. Kum bae Kim consulted about all process of hypofractionated radiotherapy for some Vietnamese patients breast, rectal, prostate, and liver cancer



Proposed Regional Activities for Next 12 Months

Host Country (Backup)	Schedule	Event
Philippine (Vietnam)	Q1 2024	Mid-term review meeting
Indonesia (Pakistan)	Q4 2025	Final progress review meeting
India (Thailand)	Q3 2024	3 rd RTC for radiation oncologists and medical physicists
Australia (Malaysia)	Q2 2025	4 th RTC for radiation oncologists and medical physicists

Issues that require attention of the NRs

- For smooth communication and project implements with NPCs, an online platform with automatic sending of data requests, uploads and downloads, and group notice mailing system is required.
- It proposes a method of adding functions within the existing PCMF system or adding tasks to the website of the RCA Regional Office.