DATE: Day 12 Month 05 Year 2025

SUMMARY of
FY2024 RESEARCH RESULTS REPORT
For International Collaborative Research with IPR, Osaka University

Research Title		Elucidating the Structures of Anticancer Target Proteins and Their Complexes with Inhibitors
Applicant	**Name**	Hyoun Sook Kim
	Affiliation	National Cancer Center Korea
	Present Title	Senior Scientist/ Principal Investigator
Research Collaborator (Host PI)		Prof. Atsushi Nakagawa and Prof. Eiki Yamashita (Host PI : Prof Atsushi Nakagawa)

Summary

Fragment-based drug discovery is a widely used method in the pharmaceutical industry for the targeted therapy that targets new drug candidates. Fragment-based drug discovery allows a more effective exploration of chemical space with a higher hit rate compared to conventional chemical high-throughput screening. We tried to solve three-dimensional structures of TDO2, KRAS, TNIK, PGGHG and PELI1 alone or in complex with their respective inhibitors selected from chemical fragment library screen for development of a novel potential therapeutics. We were able to collect and process data sets. From these data sets, we could successfully identify the electron densities of bound inhibitors in targets.

***Deadline: May 9, 2025**
***Please submit it to E-mail: tanpakuken-kyoten@office.osaka-u.ac.jp.**
***Please describe this summary within 1 sheet. Please DON'T add some sheets.**
***This summary will be published on the web.**