March 19, 2025

Xcoo Inc. Advances Cancer Genome Medicine in Thailand – Signs MOU for AI “Chrovis” Implementation

Joint Development of AI-Powered Cancer Gene Mutation Interpretation Platform Utilizing Genomics Thailand Data, Based on “Chrovis”

On March 6, 2025, Xcoo, Inc. (HQ: Tokyo, Japan, CEO: Kunihiro Nishimura, Ph.D.) signed a Memorandum of Understanding (MOU) on the joint development of Artificial Intelligence (AI)-Powered Cancer Gene Mutation Interpretation Platform Utilizing Genomics Thailand Data, with Siriraj Genomics Center, Faculty of Medicine Siriraj Hospital, Mahidol University, Medical Life Sciences Institute, Department of Medical Sciences, Ministry of Public Health and N Health Novogene Genomics Company Limited, run by N Health management, a subsidiary of Bangkok Dusit Medical Services (BDMS).

This project aims to develop a platform that utilizes AI to interpret cancer genome data using “Genomics Thailand Project," a collection data from Thailand’s national genome analysis initiative. The goal is to enhance the accuracy in cancer diagnosis and treatment through this endeavor.
Xcoo has been providing AI-driven interpretation support services for cancer genome medicine in Japan through “Chrovis,” a total solution software for genomic medicine, and has been assisting medical institutions with diagnostics and treatment selection. By participating in this project based on Chrovis, Xcoo aims to contribute to the advancement of personalized medicine in Thailand.

Caption: (Signed by representatives of each organization: From left)
- Dr. Panadda Dhepakson, Director, Medical Life Sciences Institute, Department of Medical Sciences, Ministry of Public Health
- Professor Dr. Apichat Asavamongkolku, Dean of the Faculty of Medicine Siriraj Hospital, Mahidol University
- Mr. Narongrid Galaputh, Chief Executive Officer, Non-hospital Group of Bangkok Dusit Medical Services PCL. and Managing Director of N Health Novogene Genomics Co., Ltd.,
- Dr. Kunihiro Nishimura, Chief Executive Officer, Xcoo, Inc. (Japan)

Envisioning the commercialization of a cancer gene interpretation project tailored to Thailand.
This collaboration aims to improve the Next Generation Sequencing (NGS)-based genetic code interpretation platform by integrating Artificial Intelligence (AI) to boost efficiency in cancer diagnosis. It also focuses on developing a user-friendly interface to benefit both healthcare providers and patients. The project promotes Personalized Medicine, using AI and genomic data for planning cancer prevention and personalized treatment. Furthermore, it seeks to expand genetic interpretation services with added specifications to the Thai population, with high-quality services that meet international standards.
For the signing ceremony, Mr. Yosuke Kobayashi, First Secretary (Health and Welfare), the Embassy of Japan in Thailand, joined to witness the celebratory moment.

Contribution to the advancement of cancer genome medicine in Thailand.
This collaborative project, involving four key public and private sector organizations, aims to develop an Artificial Intelligence (AI)-powered cancer gene mutation interpretation platform using data from the Genomics Thailand Project. The Genomics Thailand Project is funded by the National Science, Research and Innovation Fund (NSRF), established by the Thailand Science Research and Innovation (TSRI) to support scientific and technological research crucial for national development and can lead to long-term economic and social development in Thailand.
Currently, cancer remains a major medical challenge both in Japan and Thailand, with genetic factors being one of its significant causes. Cancer results from genomic mutations (including germline mutations), affecting diagnosis, treatment, and family screening. Research and studies on these genomic mutations play a crucial role in developing effective and personalized treatments, increasing survival rates, and reducing future cancer risks.
The development of a cancer gene mutation interpretation platform utilizing AI and data from the Genomics Thailand Project will help advance medical solutions and reduce healthcare challenges, particularly in diagnosis and treatment. AI technology enhances accuracy, shortens diagnosis time, and enables personalized treatment and prevention strategies tailored to individual patients. This initiative marks a significant step forward in Thailand's cancer diagnosis and treatment capabilities.

Utilization of Genomics Thailand Data
The enhancement of Artificial Intelligence (AI)-based gene mutation analysis using data from the Genomics Thailand Project will significantly improve the accuracy and speed of large-scale and complex gene mutation data interpretations. By utilizing Genomics Thailand Project, genetic data specific to the Thai population, AI can develop highly accurate prediction models to identify mutations associated with cancer risks. This is especially relevant for common cancers in Thailand, such as breast cancer, ovarian cancer, endometrial cancer, and colorectal cancer. Moreover, AI will be able to interpret genetic mutations that lead to cancer at a young age, enabling physicians to screen and diagnose cancer in early stage in addition to recommending a prevention plan, targeted treatment and selecting drugs based on specific gene mutations. The project will contribute to enhanced treatment efficiency and reduced unnecessary side effects from drugs, and an overall improvement in cancer care in Thailand.

Signing ceremony of the Memorandum of Understanding (MOU) for the joint development of an AI-powered Cancer Gene Mutation Interpretation Platform Utilizing Genomics Thailand Data.

Assoc. Prof. Dr. Komgrit Leksakul - Vice President of Thailand Science Research and Innovation (TSRI), stated, "The TSRI is committed to supporting and promoting collaboration between the public sector, private sector, and research institutions to drive innovations that will benefit Thailand in the long term. This partnership is expected to strengthen Thailand's research and innovation ecosystem in genomic medicine, to progress and have the potential to compete globally."

Prof. Dr. Apichat Asavamongkolkul - Dean of the Faculty of Medicine Siriraj Hospital, Mahidol University, stated, "The Siriraj Genomics Center, which participates in the Genomics Thailand Project, has conducted large-scale genomic studies on over 9,000 Thai cancer patients. The analysis and interpretation of cancer genes are highly complex, requiring experienced specialists. As a result, cancer gene testing is typically performed only in large institutions such as university hospitals, making it difficult for general clinical laboratories to conduct these tests. Utilizing AI for cancer gene mutation analysis will enable clinical laboratories in hospitals to interpret genetic data more efficiently, leading to more precise diagnoses and treatments. This advancement will allow for more targeted and effective cancer therapies for Thai patients."

Dr. Panadda Dhepakson - Director, Medical Life Sciences Institute, Department of Medical Sciences, Ministry of Public Health, added: "The Medical Life Sciences Institute plays a crucial role in promoting medical research and technology for various diseases prevention and treatment. The Department of Medical Sciences is committed to supporting the use of genetic analysis and cancer treatment data collected by the institute. This data, which includes information from central Medical Science Centers and affiliated hospitals, will be analyzed using AI technology to reduce disease risks and improve public health. This signing of the Memorandum of Understanding (MOU) between government and private sectors marks a significant step forward in Thailand's medical capabilities. By integrating modern technology into analysis of genetic data related cancer, this collaboration enhances cancer treatment strategies tailored to the unique genetic characteristics of Thai patients."

Mr. Narongrid Galaputh - Chief Executive Officer, Non-hospital Group of Bangkok Dusit Medical Services PCL. & Managing Director, N Health Novogene Genomics Co., Ltd., emphasized: "In Thailand, personalized medicine is gaining increasing popularity, driving the need to adopt cutting-edge technology for more effective and timely diagnosis and treatment. Our goal is to maximize patient benefits by ensuring highly accurate and efficient cancer genome analysis. To achieve this, N Health Novogene is collaborating with the three organizations to develop an AI-powered cancer gene mutation interpretation platform. This initiative will enable faster and more precise genomic laboratory analysis, leading to timely and targeted cancer diagnosis and treatment. Moreover, this collaboration will also expand genomic analysis services beyond conventional genomics laboratories."

Dr. Kunihiro Nishimura - Chief Executive Officer, Xcoo, Inc. Japan, a provider of bioinformatics solutions utilizing advanced computing and information technology, stated: "Xcoo has developed Chrovis, an AI-driven interpretation platform, to support physicians and cancer patients in Japan by assisting with diagnosis and treatment selection in cancer genome medicine. Over the years, Chrovis has built a strong track record in Japan. Now, as part of an international collaboration between Japan and Thailand, we are pleased to localize our AI using data from Genomics Thailand Project to better serve Thai cancer patients and healthcare professionals.

Through our collaboration with the three leading organizations in this project, we look forward to contributing to the advancement of precision medicine in Thailand by leveraging Chrovis and Xcoo's expertise in cancer genome medicine.

Caption: (From the left)
- Prof. Dr. Manop Pithukpakorn
- Dr. Panadda Dhepakson (Director, Medical Life Sciences Institute,Department of Medical Sciences, Ministry of Public Health)
- Prof. Dr. Apichat Asavamongkolkul (Dean of the Faculty of Medicine Siriraj Hospital, Mahidol University)
- Mr. Narongrid Galaputh(Chief Executive Officer, Non-hospital Group of Bangkok Dusit Medical Services PCL. & Managing Director, N Health Novogene Genomics Co., Ltd.)
- Dr. Kunihiro Nishimura (Chief Executive Officer Xcoo, Inc.)
- Mr. Yosuke Kobayashi (First Secretary (Health and Welfare), the Embassy of Japan in Thailand)
- Assoc. Prof. Dr. Komgrit Leksakul (Vice President of Thailand Science Research and Innovation)

About Xcoo

A start-up company originating from the University of Tokyo, specialized in genome analysis and bioinformatics. Xcoo has been developing and operating Chrovis, a total solution software for genomic and bioinformatics analyses. The company has received numerous startup-related awards, including the MEXT Minister's Award at Adcademic Startups 2019. Chrovis Clinical Annotation Cancer Genome Reporting (tentative name) has been designated for priority review by the Ministry of Health, Labor and Welfare concerning Software as a Medical Device (SaMD).

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Established：	April, 2011
Web site：	https://xcoo.co.jp/
Xcoo's Business：	・Development and operation of Chrovis, a total solution for genome and bioinformatics analysis ・Development of systems for high-speed data processing by parallel and distributed computing ・Development of systems for data analysis/visualization based on state-of-the-art algorithms

Contact us

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