

For immediate release

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Global Partnership Launches International Health Data Space Initiative (IHDSI) to Accelerate AI Driven Precision Medicine and Cancer Research

In a bold step toward revolutionizing data-driven healthcare, a consortium of leading research and technology institutions from Luxembourg, the United States of America and South Korea have announced the launch of the International Health Data Space Initiative (IHDSI). This initiative aims to establish a federated, secure, and privacy-compliant infrastructure designed to enable health data integration, joint clinical research, and translational innovation, with an initial focus on precision medicine in cancer and other complex diseases.

Spearheaded by the Luxembourg Institute of Health and the National Cancer Center Korea, alongside strategic technology partners NAVER Cloud Corporation, Okestro Co., Ltd., and Cipherome, Inc., IHDSI is a landmark collaboration. It seeks to overcome traditional data silos by enabling sovereign and legally compliant access to health data across international jurisdictions, aligning with European Health Data Space (EHDS) regulations and protocols like GAIA-X.

The International Health Data Space Initiative (IHDSI) sets forth a transformative vision for global health by aiming to establish a long-term strategic alliance centered on data-driven and patient-centric healthcare innovation. The initiative is committed to creating and validating a federated research infrastructure that supports both digital and clinical research. It will facilitate multi-institutional, translational cancer research across international boundaries and enable AI-driven analytics that preserve patient privacy. Furthermore, IHDSI seeks to ensure secure and interoperable access to health data, in full alignment with the European Health Data Space (EHDS) framework.

Initial research activities will concentrate on two major areas led by the Luxembourg Institute of Health and the National Cancer Center Korea. First, a prospective Bladder cancer cohort will be established to collect clinical and multi-omics data, aimed at identifying biomarkers and developing precision oncology strategies. Second, a Parkinson's disease cohort will be used to conduct a feasibility study, validating the performance and utility of the federated data connector within real-world clinical research settings.

The technological infrastructure to support IHDSI will be developed by NAVER Cloud Corporation, Okestro Co., Ltd., and Cipherome, Inc. Their responsibilities will include the development and deployment of a federated data connector that complies with GAIA-X and EHDS standards. They will also develop and validate cloud-based federated clinical data analysis capabilities along with highly scalable cloud computing resources and secure virtual environments. Additionally, these partners will design and implement governance models that support privacy-preserving data analytics across institutions and jurisdictions.

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Dr. Ulf Nehrbass, CEO of the Luxembourg Institute of Health, underscored the global importance of this collaboration: "We are proud to co-lead this strategic initiative that will fundamentally reshape how health data is accessed and used for research. IHDSI exemplifies our shared commitment to overcoming fragmentation and enabling global collaboration to accelerate precision medicine, particularly in cancer treatment".

Dr. Geon Kook Lee, Director of the Research Institute at National Cancer Center Korea, echoed this sentiment: "This partnership represents a critical leap forward in our efforts to build robust, privacy-conscious infrastructure for international clinical research. By connecting our expertise with global partners, we can unlock transformative insights for patient care that no institution could achieve alone".

The participating institutions have committed to contributing financial, technical, and human resources required for executing these collaborative activities, contingent upon securing necessary funding from public, institutional, or private sources.

To ensure coherent implementation, a Joint Steering Committee (JSC) will be established to guide strategy and high-level coordination. Technical and Clinical Working Groups will manage deliverables in research, infrastructure, and compliance, and annual review meetings will be held to monitor progress, share results, and refine next-phase planning.

About IHDSI Partners

- Luxembourg Institute of Health A public biomedical research institution at the forefront of precision medicine, LIH brings deep expertise in translational oncology, epidemiology, and systems biomedicine. LIH will lead the clinical coordination of the bladder cancer cohort and contribute its extensive infrastructure in molecular and digital health research.
- National Cancer Center Korea National Cancer Center Korea (NCCK) is the nation's central cancer institution, comprising a research institute, hospital, a graduate school, and National Cancer Control Institute. NCCK leads the full spectrum of national cancer control from prevention and diagnosis to treatment, research, and policy with expertise in cancer registration, genomics, epidemiology, and big data analytics.
- With extensive cancer big data, biospecimens, and robust clinical and research infrastructure, NCCK sets treatment standards, expands options for rare and intractable cancers, and drives innovative, multidisciplinary research. Through IHDSI, NCCK contributes to building a secure, privacy-preserving global health data ecosystem and advancing the future of precision medicine.
- NAVER Cloud Corporation A subsidiary of NAVER Corporation, has been providing IT infrastructure and platform services since 1999. With over two decades of experience powering NAVER and its affiliates, NAVER Cloud offers its public cloud service, NAVER Cloud Platform, to support enterprise digital transformation with proven technology and operational excellence.

NAVER is the world's third company to develop a hyperscale Large Language Model (LLM), and NAVER Cloud leverages this advanced AI expertise to deliver end-to-end capabilities across the entire AI value chain — encompassing AI services, data,



foundational AI infrastructure, supercomputing resources, cloud platforms, and data centers.

- Okestro Co., Ltd. Founded in 2018, Okestro is a leading cloud software company in South Korea, offering a comprehensive full-stack portfolio including CMP, IaaS, PaaS, DevOps, AlaaS, and AlOps. With proven capabilities across private, hybrid, and multicloud environments, Okestro supports end-to-end infrastructure operations and empowers digital transformation across industries. Recognized for its rapid growth and technological excellence, Okestro is emerging as one of the fastest-growing cloud solution providers in the global market.
- **Cipherome, Inc.** Cipherome, Inc. was founded in 2015 in Silicon Valley, USA, with the aspiration to become a leader in realizing a future where precision medicine is no longer just a possibility, but a reality. Cipherome's mission is clear: to provide tools that accelerate the work of researchers in precision medicine and therapeutic development, helping them make breakthroughs that lead to a healthier world. Cipherome takes pride in contributing to the healthcare and life sciences fields.

Cipherome's Compass platform, a cloud-based AI-driven and privacy-preserving data analytics platform, plays a key role in developing and validating AI models within secure virtual environments, bringing innovative tools for interpreting clinical and molecular data at scale. Cipherome stands at the forefront of innovation in AI-driven precision medicine research.

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