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ASIA EDITION

Insilico Medicine and Human Longevity to co-develop industry-first AI foundation model for longevity science

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To decode the biological mechanisms of ageing and enable predictive healthcare

Insilico Medicine, a Hong Kong-headquartered clinical-stage generative artificial intelligence (AI)-driven biotechnology company, and Human Life Foundation Models, Inc. (HLFM), a newly launched company established by US-based Human Longevity, Inc., have announced a multi-million-dollar AI co-development collaboration to build industry's first large-scale foundation models dedicated to human longevity science.

According to recent analysis by UBS, the global longevity market is currently valued at approximately $5.3 trillion and is on a trajectory to reach $8 trillion by 2030. Propelling this evolution is AI-driven drug discovery, which has emerged as a cornerstone of aging research by modeling ageing biology, predicting disease risk, and accelerating the discovery of preventive and therapeutic interventions to extend healthy human lifespan.

The collaboration between Insilico and HLFM aims to jointly develop a super-intelligence AI foundation model to decode the biological mechanisms of aging and enable predictive healthcare.

Within this framework, Insilico will leverage its expertise in multimodal foundation model development and deep learning system engineering, building on the advanced training and evaluation capabilities of MMAI Gym to systematically deliver model architecture, benchmarking, training guidelines, and computational algorithms, providing the technical foundation for the jointly developed model.

Human Life Foundation Models will integrate these tools and capabilities with Human Longevity's unique, de-identified multi-omic and clinical datasets to build advanced multimodal AI models. Drawing from over a decade of research, Human Longevity has curated one of the world's most comprehensive integrated datasets, spanning multi-omics, imaging, and longitudinal health records from thousands of individuals. By leveraging this vast repository, HLFM will support the foundation models' cognitive training, enabling the system to detect, diagnose, and manage patient conditions with clinical-grade precisi on.

By fusing these advanced algorithms with deep biological insights, the jointly developed foundation models are expected to be commercially available to drive breakthroughs in the early detection of age-related diseases, predictive health risk modeling, and the discovery of novel AI-driven therapeutics and personalised interventions to extend healthy human lifespan.