Korea deploys AI & 3D bioprinting for diabetes foot and osteoarthritis treatment

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To build a medical platform that can tap the collective intelligence of doctors all over the world

South Korea-based ROKIT Healthcare will provide a hyper-personalized medical platform that uses 3D bioprinting and artificial intelligent (AI) technology built on Google Cloud, to innovate the treatment of osteoarthritis and diabetes foot.

ROKIT Healthcare's AI solution accurately recognizes the affected area of the patient, using computer vision and deep-learning technology, and then outputs a patch with the same size and shape as the affected area to a 3D printer. The goal for this platform is to increase the treatment rate for chronic and complex diseases, improve access to medically underprivileged areas, and lower medical expenses.

The company moved its existing infrastructure to Google Cloud and used Google Cloud's AI tools to expand its medical platform. ROKIT Healthcare has established a system that can reliably expand and operate medical platforms in various regions using Google Cloud's scalable, high-performance load-balancing service Cloud Load Balancing and Google Kubernetes Engine (GKE), which provide a fully managed Kubernetes service.

Currently, the company has signed 10-year contracts with its customers worth about KRW 2.5 trillion in 20 countries around the world, increasing the number of countries in which it operates, such as UAE, Brazil, Malaysia, India, Turkiye, and Paraguay.