

Fujifilm to use AI-based technology for COVID-19 diagnosis

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Company commences joint research study with leading medical institutions in Japan, applying lesion quantification technology for pneumonia



Japan based FUJIFILM Corporation is commencing a research study to develop Artificial Intelligence (AI)-based technology to aid in the diagnosis and treatment assessment of patients with COVID-19-induced pneumonia.

The technology for quantifying the lesions of interstitial pneumonia, co-developed with Kyoto University (the Department of Respiratory Medicine, Graduate School of Medicine, Professor Toyohiro Hirai), will be applied to the project.

The company will now embark on a joint research study with local medical institutions treating COVID-19 patients, starting with the Kanagawa Cardiovascular and Respiratory Center (Yokohama, Japan).

Fujifilm began collaborating with Kyoto University in the spring of 2018 and applied Fujifilm's AI technology to categorize and quantify lesions of interstitial pneumonia to case data held by Kyoto University. The cycle of evaluating its identification performance and providing feedback for improvement was repeated numerous times for enhancement, resulting in an advanced level of precision in lesion type identification.

Fujifilm will apply this CT quantification technology for interstitial pneumonia to develop the technology that helps evaluate the progress of patients with COVID-19-induced pneumonia and determine the effectiveness of treatments. In addition, the technology is expected to contribute to accelerating the development and evaluation of drug candidates for treating pneumonia induced by COVID-19.

Fujifilm has been working on developing AI technology that can be used for assisting medical diagnostic imaging, facilitating workflow at the medical frontline and delivering maintenance services for medical equipment. The company's AI technology for use in these domains is now marketed under the brand name, "REiLI." In order to deliver solutions that meet various needs and workflows at the medical frontline, Fujifilm will continue to carry out technological development to achieve fast-paced development of solutions aimed at assisting doctors in diagnostic imaging and streamlining their workflow.