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YITU AI Aids Epidemic Prevention and Control of Coronavirus

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Efficient Assistance, YITU AI Aids Epidemic Prevention and Control of COVID-19 Outbreak

On February 4th, Shanghai Public Health Clinical Center, one of the authoritative institutions in the field of infectious diseases in China and the core unit for the treatment of COVID-19 in Shanghai, published the article “AI Aids the Scientific Prevention and Control, Intelligent Evaluation System of Chest CT for COVID-19 Launched in Shanghai Public Health Clinical Center” on its official WeChat platform.

The article announced the latest results of its use of artificial intelligence technology to help doctors carry out intelligent quantitative analysis and evaluation of therapeutic effects of novel coronavirus lesions based on CT images.

Since the outbreak of COVID-19, Yitu Healthcare responded quickly. The main R & D team sacrificed their vacations and finally completed the development of the Intelligent Evaluation System of Chest CT for COVID-19 in a very short period of time.

On January 28th, the Intelligent Evaluation System of Chest CT for COVID-19 developed by Yitu Healthcare, was officially launched and put into the front line clinical battle against the epidemic.

The system is the first AI imaging product in the industry to intelligently evaluateCOVID-19. The system realizes intelligent diagnosis and quantitative evaluation of CT images of COVID-19 through industry-leading image algorithms, and grades the severity of various pneumonia diseases of local lesions, diffuse lesions, and whole lung involvement. Furthermore, it accurately quantifies the cumulative pneumonia load of the disease through quantitative and omics analysis of key image features such as the morphology, range, and density of the lesion, and achieves a dynamic 4D contrast of the whole lung lesions on CT, helping in clinical judgment of the condition, evaluation of the efficacy, and prediction of the prognosis.

This new AI system can realize the automatic detection of the lesion area, and the quantitative analysis can be completed in 2-3 seconds. It is hoped that the birth of this system will help the country, especially the key medical institutions in the epidemic area, to improve the efficiency of quantitative diagnosis and treatment of COVID-19 and contribute to the fight against the epidemic.