

October 20, 2020

Olympus to Support Endoscopic AI Diagnosis Education for Doctors in India and to Launch AI Diagnostic Support Application

Participating in Ministry of Internal Affairs and Communications project:
"Survey Study for International Expansion of AI Diagnosis Support System
Using Ultra-High Magnifying Endoscopes in India"

Olympus Corporation (Director, Representative Executive Officer, President and CEO: Yasuo Takeuchi) took part in a ground-breaking project as a business promoter, in cooperation with the Ministry of Internal Affairs and Communications (MIC), entitled, " Survey Study for International Expansion of AI Diagnosis Support System Using Ultra-High Magnifying Endoscopes in India." The project aims to develop advanced endoscopy diagnostics in India, where there are relatively few endoscopists.

In collaboration with CYBERNET SYSTEMS CO., LTD., Olympus has established an AI diagnostic support system at a major medical institution, the Asian Institute of Gastroenterology (AIG) based in Hyderabad, India. Specialist lecturers and physicians from Showa University Northern Yokohama Hospital provided expert guidance to AIG doctors. In addition to training AIG doctors in techniques for detecting diseases and differential diagnosis by colonoscopy, they also trained the doctors on how to instruct the next generation of endoscopists.

The project started on October 12. At the kick-off meeting, Satoshi Hemmi, Deputy Director-General of the Information and Communications Bureau, the Ministry of Internal Affairs and Communications commented, "We hope to contribute to the spread of AI endoscopy systems and the development of medical care in India through training future leaders in AI endoscopy systems in India. We also hope that the cooperation between India and Japan in the field of healthcare ICT will continue to develop."

In addition to the ultra-magnifying scope Endocyto¹ released last year, Olympus will release endoscopic diagnostic support software equipped with AI in India from December. The endoscopic diagnostic support software EndoBRAIN² and EndoBRAIN-EYE³ will be utilized for physician training in India. Olympus intends to assist in the development of physicians and promote the use of endoscopic diagnostics.

¹ An endoscope that enables observation at the cellular level in real time with up to 520 times optical magnification.

² AI real-time in-vivo analysis of colon lesions taken with ultra-high magnifying endoscopes, numerically indicating the possibility of neoplastic and non-neoplastic polyps to assist physicians in the differentiation and detection of polyps through figures.

³ AI endoscopic diagnostic imaging support software that assists physicians in diagnosing lesions by alerting if a polyp or other lesion is detected using regular colonoscopy images.

Background of Olympus' Participation

In India, the rate of cancer morbidity is expected to increase as the economy grows. On the other hand, there is a severe shortage of doctors who can conduct precision diagnostics with endoscopes, which are essential for early detection and treatment of cancer. Olympus participated in this project to support trained AIG specialists to train doctors in India and neighboring countries and to contribute to the popularization and development of endoscope diagnostics using the latest AI technology.

Ministry of Internal Affairs and Communications Project

- **Purpose:**

The MIC aims to realize the sustainable development goal and SDG pledges to ensure "no one will be left behind." To this end, the MIC aims to realize a model that contributes to SDG through digitization and to disseminate and promote an SDG + ICT model domestically and overseas between both public and private sectors. This project aims to contribute to the introduction and dissemination of Japan's endoscopic AI diagnostic support system to India and neighboring countries in response to the social issue of increasing cancer prevalence in India.

- **Projects:**

- 1) Survey on the Current Status of Policies in the Medical Health Sector in India and the Current Status of the Introduction of Medical ICT in India:
Collecting information from major medical institutions and external research institutions and investigating the spread of medical systems, including endoscopic systems.
- 2) Verification through proof-of-concept tests in India:
Physicians from the Showa University Northern Yokohama Hospital will train AIG physicians, from the detection of disease utilizing a colonoscope to discriminatory diagnosis, and train them as lecturers to train instructors. MIC provided equipment and training courses.