

Tencent Miying launches AI-supported auxiliary diagnostic system

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Tencent Miying is able to assist doctors in screening for esophageal cancer, lung nodules, diabetic retinopathy, colorectal tumors, breast cancer and other diseases through its AI medical image analysis.



Tencent has announced that the launch of an AI-supported auxiliary diagnostic system for conducting digital colposcopy at the Global Digital Ecosystem Summit being held in Kunming, China.

This latest technology can rapidly identify the cervical transformation zone and the location of a lesion, enabling doctors to more accurately and efficiently diagnose cervical cancer – the most common cause of malignant tumors in the female reproductive organs.

"There is a pressing need for smart technology in the healthcare information system," said Tencent's vice president Ding Ke. "Tencent

is exploring ways to provide the medical industry with targeted solutions and is spearheading the use of new technologies in the sector."

He said, "The launch of this technology is another breakthrough in AI-assisted diagnosis for major diseases and follows close collaboration with medical experts and other partners. In line with our Tech for Good vision, it also realizes substantial social value."

Developed under the guidance of Professor Qiao Youlin, Department of Epidemiology, Cancer Hospital at the Chinese Academy of Medical Sciences, the AI-assisted auxiliary diagnostic system for digital colposcopy, created by Tencent Miying and Tencent YouTu Lab, enables doctors to tackle issues in diagnosing patients who are at a high risk of developing cervical cancer.

Such issues include identifying the cervical transformation zone, locating cervical cancer and precancerous lesions, and formulating accurate biopsies and quality programs.

Tencent Miying can assist gynecologists in quickly identifying cervical transformation areas and the location of lesions, solving the "last mile" problem in cervical cancer prevention.

As the most common type of malignant tumor in the female reproductive system, cervical cancer is the fourth leading cause of cancer death in women, accounting for the top 13% of all malignant tumors in females. According to WHO, there were about 527 thousand new cases of cervical cancer worldwide in 2012, 85% of which occurred in less developed areas, with deaths occurring in about 255 thousand cases.

In China, approximately 100 thousand women are diagnosed with cervical cancer each year, representing 20% of the world's new cases. It is estimated that deaths occur in around 30 thousand cases.

Tencent Miying's AI-assisted diagnosis system for digital colposcopy is therefore of huge value to both patients and doctors.

"If you carry out your scientific research diligently, you can bring fruitful results to the world and receive recognition from the international community," said professor Qiao Yulin. "WHO has put forward a global plan to eliminate cervical cancer. As a country with a high burden of cervical cancer, China has the opportunity to play an important role in the elimination of cervical cancer and should therefore seek to make a difference."

He added, "In the future, AI will contribute towards preventing and controlling cervical cancer not only in less developed areas within China, but also as part of Tencent's efforts to protect the health of women in other developing countries around the world."

In August 2017, Tencent released Miying, its first product applying AI technology in the medical field, which now has two core competencies: AI medical imaging and AI-assisted diagnosis.

Tencent Miying is able to assist doctors in screening for esophageal cancer, lung nodules, diabetic retinopathy, colorectal tumors, breast cancer and other diseases through its AI medical image analysis.

Its AI-assisted medical diagnosis engine enables doctors to identify and estimate the risk of over 700 diseases, improving their diagnostic accuracy and efficiency.