

DISEASE DIAGNOSIS FROM CHEST X-RAY: ARTIFICIAL INTELLIGENCE

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Computer-Assisted Detection (CAD) products use Artificial Intelligence (AI) to read X-ray images and predict the probability of the presence of TB-related signs to inform diagnostic decision-making.

All products managed to halve the number of follow-up diagnostic tests required while maintaining high sensitivity of over 90%. In addition, all Artificial Intelligence (AI) products were more than 80% responsive, even if two-thirds reduced the number of ongoing trials. The two products also met the target product profile of 90% sensitivity and 70% specificity set by the World Health Organization (WHO) for a TB triage test. Therefore, Artificial Intelligence (AI) can lower the costs of TB programs without significantly compromising the number of cases detected.

Radiology has benefited from all technological developments and has always maintained its importance in diagnosing and treating the disease. With rapidly developing image processing and Artificial Intelligence (AI) technologies, many technologies are being developed to analyze and diagnose conditions to be defined more automatically, faster, and more accurately.

New developments in radiology are being developed to provide many benefits to patients, healthcare professionals, and healthcare institutions, such as early diagnosis of the disease, quality of treatment, and cost reduction.



One of the most critical technology developments today, Artificial Intelligence (AI), seems to be used in almost every sector. However, while large companies spend serious money on their Artificial Intelligence (AI) technologies, health is one of the sectors where this technology will be used the most.

The average reporting time in chest X-rays decreased from 11 days to 3 days thanks to the system developed using Artificial Intelligence (AI).



Abnormal conditions in chest X-rays will be detected within three days, thanks to the system developed using Artificial Intelligence (AI).

According to King's College London, one of the leading universities in England, the Artificial Intelligence (AI) system developed using chest X-ray data of 500 thousand adults makes it easier to detect cases with urgency by shortening the X-ray reporting time.

Routine chest X-rays monitor the lungs, heart, bones, and soft tissues and diagnose abnormal conditions in these organs.

Developed by researchers from King's College London, the Artificial Intelligence (AI) system can interpret visual patterns in chest X-rays and detect whether the patient's condition is an emergency, and make recommendations to the radiologist regarding the patient's condition.

Developed by researchers from King's College London, the Artificial Intelligence (AI) system can interpret visual patterns in chest X-rays and detect whether the patient's condition is urgent and make various recommendations to the radiologist regarding the patient's condition.

Having abnormal chest X-rays that show signs of emergency disease reviewed by a radiologist as soon as possible allows patients to receive the most appropriate treatment quickly and increase the success rate of treatment.

The researchers state that thanks to the developed Artificial Intelligence (AI) system, reporting delays will be eliminated, and patients with urgency will be treated quickly with early diagnosis.

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