Chest X-ray Abnormality Detection AI

Intended Use (SaMD)

This software is intended for use by qualified radiologists and medical professionals to assist in the interpretation of posteroanterior (PA) chest X-rays. It automatically analyses input images and highlights suspected abnormalities to support faster, consistent, and more accurate diagnoses.

The AI model is capable of detecting multiple clinically significant thoracic findings, including:

- Ground-glass opacities (GGO)
- Hilar prominence
- Koch's lesions (tuberculosis indicators)
- Swine flu
- Pulmonary nodules
- Rib fractures
- Lung consolidation
- Cardiomegaly
- Pleural effusion
- Blunted Costophrenic (CP) angles
- Pulmonary fibrosis
- Pneumothorax

The device is designed for use in hospitals, diagnostic centre's, and telemedicine platforms. It serves as a diagnostic aid, acting as a second reader to enhance clinical workflow efficiency and support early disease detection. Final diagnostic responsibility remains with the attending medical professional.

Competitors in the Market

Company / Product	Key Features	Remarks
Qure.ai (qXR)	Detects 30+ chest findings, TB screening, triage & workflow automation	CE certified, widely deployed in India & abroad
Lunit INSIGHT CXR	AI analysis of chest X-rays for 10 major abnormalities	CE, FDA cleared; focus on radiology integration
DeepTek CXR AI	Findings classification, structured report generation	India-based, PACS integration; radiologist-in-loop
Zebra Medical Vision	Multiple radiology algorithms including chest X-ray	Acquired by Nanox, focus on population screening
Oxipit ChestLink	Autonomous reporting for normal CXRs	CE MDR-approved, used in Europe