



# Chest X-Ray Solution

## Intelligent Healthcare



### Nanox.AI Chest X-Ray Solution

#### OFF YOUR CHEST...

Pneumothorax and Pneumoperitoneum are two critical conditions identified on chest X-rays where every minute counts for optimal patient care.

Pneumothorax, free air in the chest cavity, can quickly enlarge and become life threatening if not treated on time. They can be spontaneous, caused by trauma or in hospitalized patients are often iatrogenic — secondary to a medical procedure. Over 30% of pneumothoraces are missed on standard chest X-rays.<sup>[1]</sup>

Pneumoperitoneum is free air in the abdominal cavity, frequently visualized on a chest X-ray. While the most common etiology is a recent surgical procedure, free air may be a sign of bowel perforation, requiring immediate medical attention.

Typically, radiology worklists are read first-in first-out which means that cases with significant abnormalities such as pneumothorax and pneumoperitoneum often wait while less urgent studies are reported. In addition, as many chest X rays are normal, subtle findings of these urgent conditions are more easily missed.

Nanox.AI analyzes all the Chest X-Rays in the queue and prioritizes cases with an AI detected pneumothorax and pneumoperitoneum (510k pending) so patients can get the medical attention they need efficiently.

[1] The radiologic evaluation of the patient with suspected pulmonary thromboembolic disease, M J Kelley, L P Elliott, PMID: 1088970 DOI: 10.1016/s0025-7125(16)32054-5

### THE SOLUTION

Nanox.AI's Chest Solution identifies suspected Pneumothorax and Pneumoperitoneum. These insights are then prioritized when shown on the PACS workstation and worklist.

## HOW IT WORKS



Nanox.AI receives Chest X-Rays from the PACS.



The Nanox.AI Chest X-Ray Solution automatically analyzes images in seconds.



Each AI detected case of Pneumothorax or Pneumoperitoneum is flagged by the algorithm with the suspected clinical finding and sent to the radiologist worklist.



Radiologists are alerted on acute cases so they can give them immediate attention, read, and confirm findings.



Patients in critical condition are directed to the emergency care they need.

## VISUALIZED INSIGHTS

Where available, annotated images can be added into the study as secondary captures for closer review by the radiologist.



Figure A - Pneumothorax

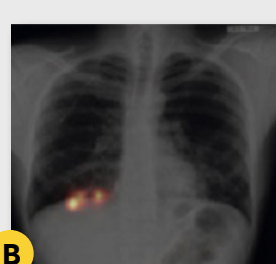


Figure B - Pneumoperitoneum

\*Not currently available for the EU Market

### Technology And Installation

Chest X-Rays are forwarded from the PACS and sent anonymously to the cloud-based Nanox.AI Analytics platform.

Nanox.AI's Chest X-Ray Solution automatically analyzes all adult chest x-rays, identifying signs of pneumothorax and pneumoperitoneum, flagging them. Radiologists receive cases for review flagged and prioritized at the top of the PACS worklist at the workstation, then prepare their report and recommendations.

**Nanox.AI integrates seamlessly with any PACS system, and can be installed on the cloud or on-premises.**

All Nanox.AI solutions are GDPR and HIPAA compliant.



We invite you to request a demo →

[www.nanox.vision/ai](http://www.nanox.vision/ai)  
Contact Us: [info.ai@nanox.vision](mailto:info.ai@nanox.vision)

