



contextflow



OXIPIT

## Chest experts Oxipit and contextflow team up for diagnostic quality assurance

The new partnership aims to mitigate the risk associated with missed findings in CT medical imaging studies. The collaboration will combine Oxipit's ChestEye Quality and contextflow's SEARCH Lung CT products to identify missed findings in CT scans in near-real time. ECR 2022 will offer the first preview of the combined solution, and the first installation will be deployed at Leiden University Medical Center.

ChestEye Quality analyzes medical images and corresponding radiologist reports. Acting as a virtual safety net, the software sends a notification to the radiologist if it detects a mismatch or a missed finding not identified in the radiologist report.

ChestEye Quality can operate in retrospective and prospective settings, providing quality audit notifications in near-real time. The product is already deployed in more than 10 medical institutions worldwide.

Out of nearly 200,000 analyzed chest X-ray images, an average of 1 in 552 (0.18%) chest X-ray studies feature clinically-significant missed findings. The result varies from 0.08% to 0.92% depending on the type of medical institution. 78% of the missed findings relate to pulmonary nodules, aiding earlier detection of lung cancer and significantly improving patient treatment prognosis.

The contextflow partnership will expand ChestEye Quality capabilities into the CT modality.

contextflow SEARCH Lung CT is a clinical decision support system that automatically detects, quantifies and visualizes key disease patterns and lung nodules in CTs of the lungs over time, displaying relevant information directly in the radiologist's PACS viewer. The tool is relevant for the analysis of many suspected diseases, including interstitial lung disease (ILD), chronic pulmonary obstructive disease (COPD), and lung cancer.

In a clinical impact study at the Medical University of Vienna (MUW), an earlier version of SEARCH Lung CT showed an average reading time savings of 31% when contextflow SEARCH

Lung CT is available for use with a trend towards improved diagnostic accuracy. The study was recently published in [European Radiology](#).

"We are excited to partner with experts in CT AI medical imaging. The ChestEye Quality AI double reading approach has already proven itself in the CXR modality, helping radiologists to spot more clinically-relevant nodules and improving early diagnostics of lung cancer. Collaboration with contextflow highlights the robustness of the ChestEye Quality framework, showcasing how the AI double reader approach can be easily expanded into other medical imaging modalities," says Oxipit CEO Gediminas Peksys.

contextflow Chief Commercial Officer Marcel Wassink continues: "Radiologists tell me they are often extremely busy or even exhausted towards the end of their shift. Reading lung CTs is a complicated task, whereby even the most experienced radiologists have only moderate consensus. Therefore they can't deny they may sometimes oversee early signs of a disease in the scan or oversee or misjudge relevant patterns, which is supported by scientific publications. With this cooperation we aim to provide radiologists a safety net that catches potential mismatches between the contents in the radiology report and the visual findings related to all patterns in the CT scan detected by contextflow. The goal is to further support radiologists with a friendly warning system that helps them double check their analysis of the CT scan."

The first ChestEye CT Quality deployment is planned at the Leiden University Medical Center (LUMC).

"In the domain of chest X-ray and CT imaging, we have been successfully working with both Oxipit and contextflow for several years, with their applications integrated in the radiology workflow and in use in daily clinical practice. We are looking forward to having the quality functionality expanded to cover chest CT imaging with the goal of further improving the quality of care for our patients," notes Head of Imaging Services Group at LUMC Dr Willem Grootjans.

#### **About Oxipit | [www.oxipit.ai](http://www.oxipit.ai)**

Oxipit develops AI applications for diagnostic medical imaging. With a team of award-winning data scientists and medical doctors, the company aims to introduce innovative artificial intelligence breakthroughs to everyday clinical practice.

#### **About contextflow | [www.contextflow.com](http://www.contextflow.com)**

contextflow is a spin-off of the Medical University of Vienna (MUW) and European research project KHRESMOI, supported by the Technical University of Vienna (TU). Founded by a team of AI and engineering experts in July 2016, the company has received numerous awards; most recently, contextflow was named a Born Global Champion 2021 by the Austrian Chamber of Commerce. Its clinical decision support software SEARCH Lung CT is CE Marked and available for clinical use within Europe under the new MDR.