Chest MSK AI is CE marked and uses AI that automates detection in X-Ray images and delivers customizable reporting within minutes -- creating a secure H24 routine which helps physicians and clinicians to confirm their diagnostic decisions, and to increase the overall productivity to better focus on the patient.
Benefits

Increase productivity and decrease reporting time Accelerate

By integrating AI into X-ray imaging clinical workflows, Chest | MSK AI provides emergency physicians and radiologists with automated detection of abnormalities, measurements and customizable reports – that increases productivity and decreases reporting time by reducing tedious manual tasks and prioritizing urgent cases.

Fast Accurate Results

Chest | MSK AI is CE marked and leverages AI to quickly detect and report abnormalities in radiographs – enabling physicians to make faster and more consistent triage and diagnostic decisions.

Optimized Workflow

Chest | MSK AI does not require on-premises hardware and results are accessible in your own viewer or through a single user-interface zero footprint viewer and an internet connection. It seamlessly integrates with existing PACS, EHR, worklist, notification, and dictation systems ensuring exams are read accordingly and consistently.
Features

Detection and Rule Out Support

Diagnostic assistance for fast and thorough interpretation

A trusted assistant for reading radiologist and emergency department X-rays, the Arterys Chest | MSK AI places bounding boxes around suspected areas and displays negative findings in the Arterys diagnostic cloud native viewer. The AI results are also made visible in PACS Viewers and automatically pre-dictated in reporting templates.

Flag in RIS/PACS Worklist

AI-generated “STAT” flags for smarter and unbiased prioritization

The algorithm automatically scans plain films and seamlessly pushes a STAT-like flag to RIS/PACS worklists, once an abnormality is detected.

Automatic measurement

This patented feature offers productivity gains by automating the standard measurements:

- Gonometry
- Coxometry
- Pelvic tilt
- Hip dysplasia
- Hallux-varus and hallux-valgus
- Opening angles of the forefoot
- Hollow foot, flat foot (Djian-Annonier angle)
- CSA angle
Common Pathologies in All View Types

Seven abnormalities in Chest | MSK x-rays of all view types (for adults and pediatric) The algorithm is trained to detect fracture, dislocation, elbow joint effusion, pleural effusion, pulmonary nodule, pulmonary opacity, and pneumothorax. It is capable of reading X-rays of all view types as well as images from portable X-ray machines.

Robust Training

Trained with 100,000 x-rays from eight different institutions

The training set contains 1,000,000 ED X-rays harvested from eight different institutions and six different OEM vendors. The ground truth annotation was conducted by 15 radiologists of over 20 years of experience.

Automatic Report

AI-powered automatic report dictation

For radiologists, the algorithm pre-populates the study description and findings in fields inside a dictation software. It will not submit a report without a radiologist's approval.

Incorporate Additional AI Models Into Existing Workflows

Increase and customize diagnostic assistance

In addition to the seven pathologies, diagnostic assistance of several more illnesses is at your disposal. Mix and match various algorithms clinically validated to suit your needs in X-ray workflow.
The Arterys Platform Benefits

<table>
<thead>
<tr>
<th>Cloud-based supercomputing</th>
<th>Zero Footprint Diagnostic web viewer</th>
<th>AI augmentation, interaction</th>
<th>Clinical workflow integration</th>
<th>Secure and Resilient</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Blazing fast processing of imaging data with Multi GPU based rendering</td>
<td>✔ Access images and tools anywhere</td>
<td>✔ More consistent, accurate diagnostics</td>
<td>✔ Speed diagnosis with automated reporting</td>
<td>✔ GDPR, HIPAA, SOC2 ISO 27001, Information Security Certified</td>
</tr>
<tr>
<td>✔ No heavy IT infrastructure required on-prem!</td>
<td>✔ All you need is internet</td>
<td>✔ Eliminates tedious and error-prone manual tasks</td>
<td>✔ Improve physician collaboration across geography</td>
<td>✔ World class security comes standard, with ISO-27001, SOC-2 and HIPAA requirements for data security.</td>
</tr>
<tr>
<td>✔ Elastic scalability means you never have to worry about performance</td>
<td>✔ Easily share cases and workspaces</td>
<td>✔ CE marked &amp; FDA cleared algorithms</td>
<td>✔ Inject results and image/video into your reports.</td>
<td>✔ Constant monitoring of adverse events maximize uptime, impact.</td>
</tr>
<tr>
<td>✔ Low maintenance, always up-to-date, no-cost automatic continual updates</td>
<td>✔ FDA and CE Cleared</td>
<td>✔ Data-driven decisions</td>
<td>✔ Study in-context URL launching with single sign-on means Arterys automatically moves with your workflow</td>
<td>✔ Real-time interactive support is also available through in-app chat feature</td>
</tr>
<tr>
<td></td>
<td>✔ Fully interactive real-time visualization of DICOM images</td>
<td>✔ Vendor neutral AI, easily integrate any algorithm into clinical workflow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Web-based zero footprint viewer with full-screen mode</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✔ Mac, PC, tablet and phone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

System Requirements

Arterys is completely hosted in the cloud using Amazon Web Services (AWS) servers in several regions accessible globally through a Microsoft Edge or Google Chrome web browser by navigating to https://app.arterys.com

**Internet Speed**
3 Mbps up/down Internet connection with a maximum of 100 ms latency.

**Website Access**
WebGL is enabled on the device used to access the Arterys website. WebSocket is not blocked.
*Consistent experience across Mac, PC and mobile devices.*
Zero foot-print viewer no software installation required.

**Browser**
Google Chrome Web Browser version 82 or above.
*Microsoft Edge Web Browser version 80 or above.*

**Edge Service**
Custom software installed on a server within the hospital network or in the cloud to automate the sending of DICOM objects from the scanner to the cloud and to PACS while ensuring that the patient's protected health information (PHI) remains within the hospital network (refer to Edge Data Sheet)