TERARECON AV™

The Most Comprehensive and Capable Enterprise AV Solution You'll Ever Need

TeraRecon AV, the next generation of TeraRecon Intuition™, is trusted by over 2,000 hospitals worldwide and delivers advanced medical imaging with AI-driven automation and a true cloud-based deployment for imaging enterprises.

By seamlessly integrating with existing systems, it empowers healthcare teams with innovative tools for unmatched diagnostic precision, enhanced patient care, and streamlined workflows across specialties.

Delivering SaaS-based advanced medical imaging with AI-driven automations, enhancing diagnostic precision, efficiency, and care.

THE POWER OF INTUITIVE WORKFLOWS

Automate complete image post-processing with intuitive workflow steps from a recognized industry innovation leader.

## INTEROPERABLE & CLOUD-ENABLED ENTERPRISE SOLUTION

Built on a secure, cloud-based infrastructure, TeraRecon AV integrates with virtually any system or PACS. Deploy as you wish, scale as you grow, and extend access enterprise-wide for standardized, SaaS-based imaging workflows.

LEVERAGE THE LATEST IN AI ENABLEMENT

As an AI company, ConcertAI delivers patient care insights that healthcare professionals can leverage at every stage of the care journey. Through intelligent analysis, management automation, accessible CDS modules, and data-rich research, TeraRecon AV continuously evolves to enhance patient outcomes.

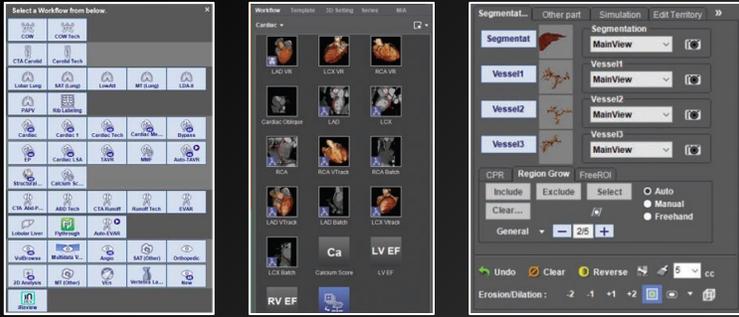## HIGH PHYSICIAN SATISFACTION & EASY TO BUY

Subscription-based purchasing provides maximum budget flexibility and simplified access to innovative workflow templates. The enterprise-ready SaaS model ensures predictable costs, scalable performance, and consistently high end-user satisfaction rates.
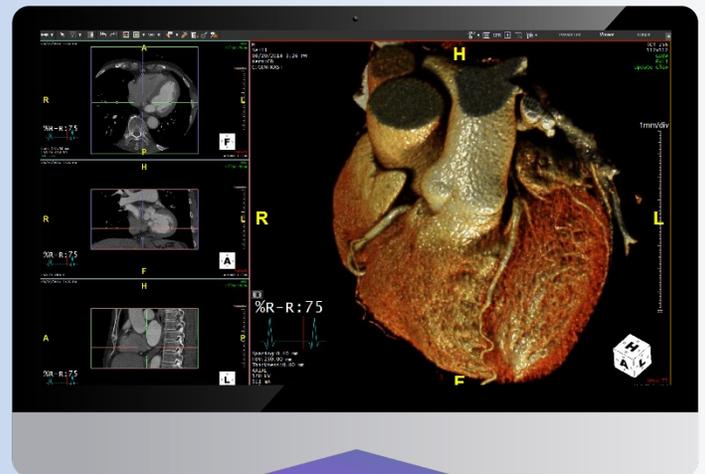
What's New?

TeraRecon AV transforms structural heart imaging with advanced automations for TTVR, TMVR, and LAA procedures. Featuring zero-click 3D batching, AI-driven tools, and seamless system integration, it enhances diagnostic precision, efficiency, and planning. Now supporting 3D segmentation imports, it's designed for clinicians to meet real-world needs and clinical research.

Why TeraRecon AV?

Intelligence & Automation at Each Step

TeraRecon AV Solution combines advanced imaging visualization with AI-driven automation to enhance diagnostic precision, improve patient care, and reduce manual effort. Built on a secure, cloud-based infrastructure, it supports enterprise-scale imaging workflows and integrates effortlessly with Radiology and Cardiology PACS systems.

CONSISTENT HIGH PERFORMANCE

Includes the latest parallel processing technologies from NVIDIA to perform complex calculations, AI, and scientific simulations at speed.

AI-POWERED ADVANCED VISUALIZATION

AI-enhanced workflows automate AV processes with greater consistency, such as short-axis contour segmentation[1]. They integrate AI inputs from multiple algorithms into a unified TeraRecon AV-based 3D and 2D interpretation experience.

CREATE & TRAIN YOUR OWN ALGORITHMS

Quickly convert TeraRecon AV Solution post-processed data – completed in the ordinary course of interpretation – into volumetric, high-fidelity labeled data sets using Data Extractor. This data can be further optimized by leveraging TeraRecon AV Solution as a powerful, clinical-quality data labeler for data scientists to create and train algorithms.

SPECIALTY CARE ACTIVATION & COORDINATION

Leverage a growing library of optimized clinical workflows, supported by Premier Success[2] training, to tackle complex patient care scenarios.

CLINICIAN-CENTRIC DESIGN

The platform prioritizes clinician satisfaction with intuitive workflows, customizable templates, and structured reporting, ensuring ease of use and high adoption rates.

SPECIALIZED WORKFLOWS

Tailored workflows for cardiac imaging, stroke care, oncology, and more provide clinicians with tools to support precise diagnosis, treatment planning, and monitoring.

AI-DRIVEN INNOVATION

Leverages integrated AI to automate workflows, enhance diagnostic precision, and streamline processes across multiple specialties.

TAILORED TO YOUR OPERATIONAL BUDGET

An annual subscription-based purchase for maximum budget flexibility. Eliminate annual service renewals, while taking advantage of one simple annual charge.

[1] Results provided by TeraRecon Cardiac.Chambers.MR.
[2] A benefit of the Premier Success add-on.

AI-Powered Workflow Solutions Tailored to Your Clinical Needs

GENERAL WORKFLOWS
- Volumetric Navigation
- iGentle
- Autobatch
- Tool Workflows
- CPR Enhancement
- DICOM Standardizer
- Updated 3D Workflow

AI-ENABLED
- Best-of-Breed AI Content via TeraRecon AI Framework[1]

NEUROLOGY
- CT Head & Neck
- Brain Perfusion
- Maxillofacial

BODY IMAGING / ONCOLOGY
- CT Body
- MR Body
- PET/CT Fusion
- Liver Segmentation
- Nodule Segmentation
- Measurement Tracking
- Mirada XD CT-MR Image Registration

MSK
- Vertebral Labeling Workflow
- Rib Labeling Workflow
- Measures such as TT-TG and Cobb Angles

CARDIOLOGY
- CT Cardiac
- MR Cardiac
- TAVR
- TTVR
- Mitral Valve/TMVR
- LAA

PULMONOLOGY
- CT Chest
- Lung Segmentation
- Lung Density Analysis II

VASCULAR
- EVAR
- Interventional Radiology
- Calcium Workflow
- Aorta.CT, AI-automated Workflow[2]
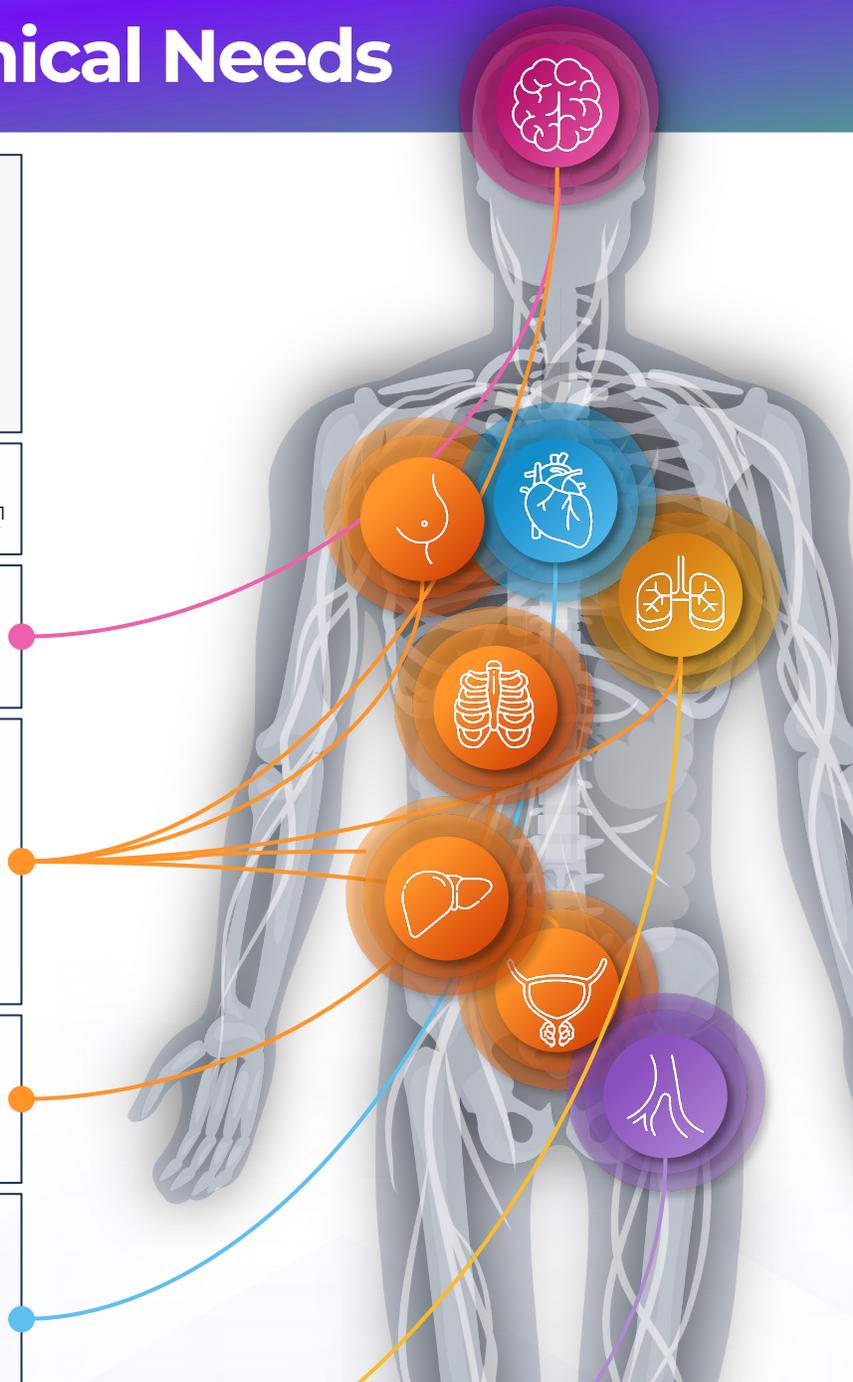
[1]Registered as Eureka Clinical AI in global markets.
[2]Requires TeraRecon Aorta.CT.

Information contained in this page outlines the functional capabilities of the TeraRecon AV. Actual functionality within a particular customer solution is determined by the license keys of the purchased package. Select functionality may not be available in all regions. Contact your local TeraRecon representative to check availability for your region.

TeraRecon General Workflows

- For 2D, 3D, and 4D viewing
- Anatomy segmentation and volume analysis
- Configurable workflow creation
- Comprehensive and robust measurement tools
- Image batching and report generation
- Comparison views for follow-up patient review
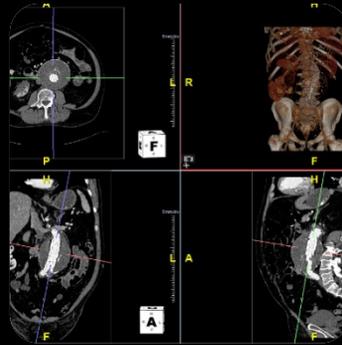
VOLUMETRIC NAVIGATION

IGENTLE

- Noise reduction management
- Improve the effectiveness of 3D image quality
- Improve contouring, segmentation features, and centerline accuracy

- 2D batch output - reformation of image data into alternative planes
- Create a derived series with any number of images
- FOV, slab thickness, slice spacing, and rendering mode including MIP
- Zero-click 3D Batching
- APS Auto Stitch & Batch
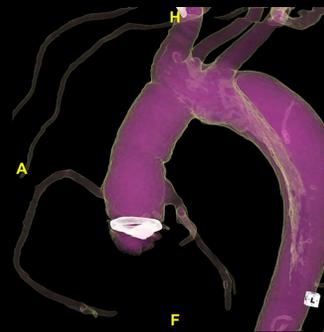
AUTOBATCH

AUTOWORKFLOW

- Automated and customizable workflow steps
- Simultaneously work on additional studies
- Tailored workflows with command functions for automated measurements and image manipulation
- Tool workflows
- CPR enhancement
- DICOM Standardizer
- Updated 3D workflow

TeraRecon NEUROLOGY
Stroke Care, Timely Automation, and Optimized Neuro Disorder Workflow

TeraRecon NEUROLOGY delivers specialized tools for stroke care, tumor evaluation, and neurological disorder assessment combining CT, MR, and PET data into unified, interactive workflows. Automated perfusion maps – including TMax, hypoperfusion, and mismatch – support timely triage and treatment planning. Advanced image fusion, motion correction, and vessel analysis improve diagnostic accuracy and cross-specialty collaboration.

AI-ENHANCED DETECTION
- AI automation highlights ischemic areas
- Enables faster decision-making for proper treatment

ADVANCED AV FOR TUMOR VISUALIZATION
- 3D projections for clear visualizations of brain tumors, aneurysms, and vascular malformations
- Help with triage decisions

INTEGRATED TREATMENT PLANNING
- Seamlessly connected
- Enhanced communication
- Coordinated care delivery across specialties
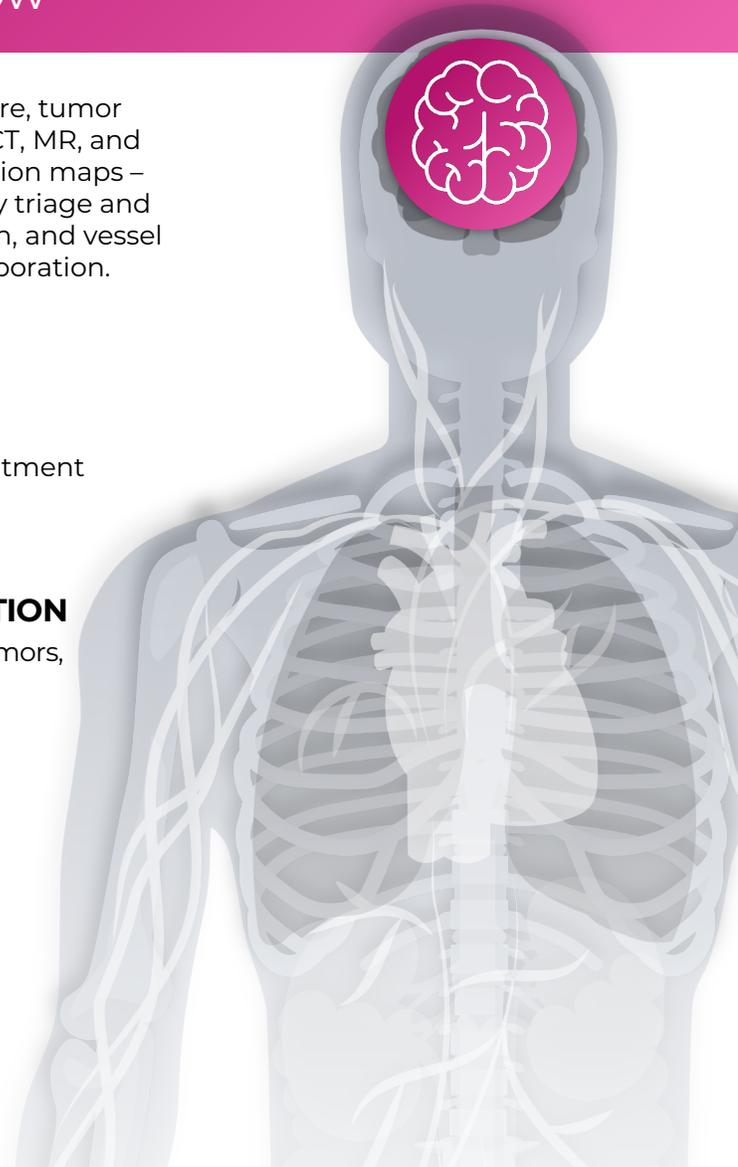
AI ENABLED CLINICAL WORKFLOWS
- MR Brain Perfusion
  (Cercare – CMN, Imaging Biometrics)
- Stroke & Perfusion
  (Avicenna - CINA, Cercare - CMN)
- Neurological Disorders
  (Combinostics – cNeuro cMRI)

CUSTOMER BENEFITS
- Faster patient assessment
- Improved collaboration between neurology and radiology
- Stroke intervention insights
- Single, cohesive AI-enabled AV solutions
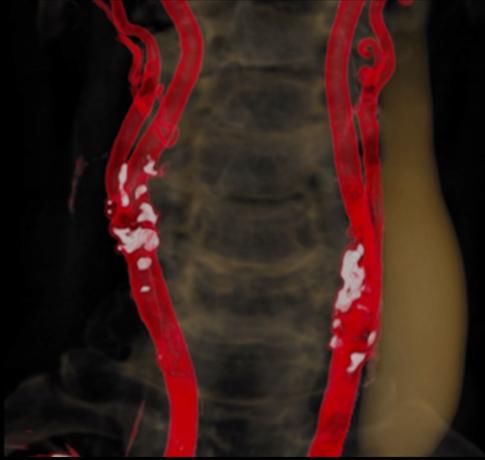
CT HEAD & NECK

- Automatic centerline identification simplifies stenosis measurements
- Dual-source data support
- Time density evaluation: maps include CBF, CBV, MTT, TTP, Tmax*, hypoperfusion*, mismatch*, and more
- Multi-modality image fusion and image subtraction

*Results provided from TeraRecon Neuro

MAXILLOFACIAL

- Panoramic projection
- Cross-sectional multi-planar reconstruction
- Definable mandibular groove path
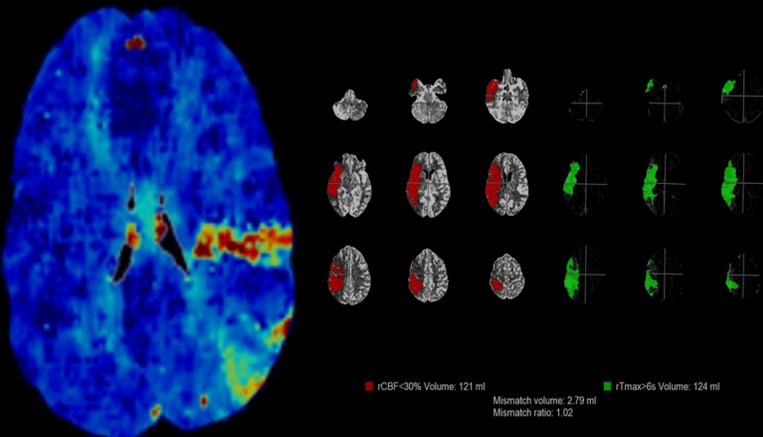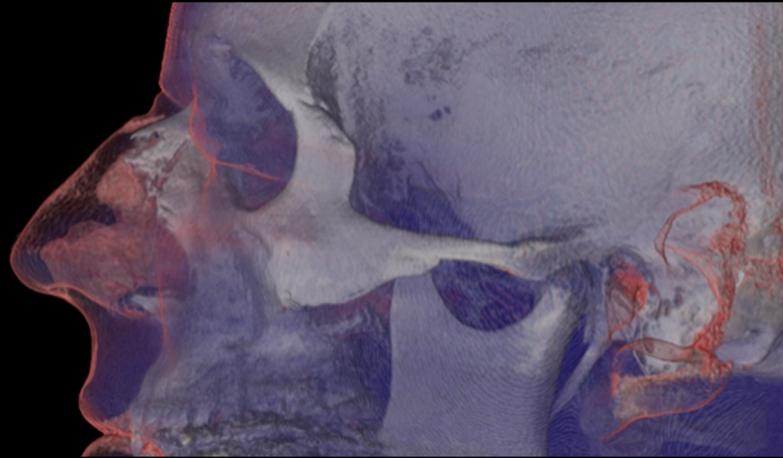
NEURO CT PERFUSION

- Tmax
- Mismatch
- Hypoperfusion Maps

TeraRecon BODY IMAGING/ONCOLOGY
Precise Imaging Workflows to Aid Complex Cancer Treatments

TeraRecon BODY IMAGING & ONCOLOGY streamline tumor identification, segmentation, and treatment monitoring across modalities (CT, MR, and PET)*. Clinicians benefit from multiphase analysis tROI mapping and advanced registration fusion for confident staging and follow-up. AI-powered tools enable lesion tracking, organ volume analysis, and precise therapy planning for complete cases.

LONGITUDINAL MONITORING
- Follow tumor progression over time with AI-assisted segmentation and advanced visualization tools

TUMOR IDENTIFICATION & STAGING WITH AI
- Automatically highlight suspicious lesions in multiple modalities (CT, PET, MR)*
- Aid in early cancer screening and detection

AI ENABLED CLINICAL WORKFLOWS

- Prostate Cancer (BotImage, Lucida Medical)
- Virtual Lung Clinic (Optellum)
- Liver (Perspectum)
- Lung Cancer Detection (Riverain, Infervision, Coreline)
- Brain Tumor Imaging (Imaging Biometrics, Cercare)
- Breast Density Imaging (ClariPi)

CUSTOMER BENEFITS

- Streamlined Screening
- Enhanced Patient Monitoring
- More Personalized Care Plans
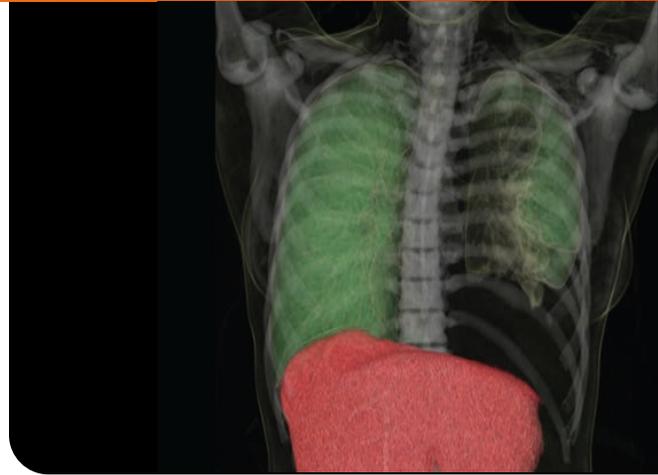- Improved Outcomes and Clinician Confidence
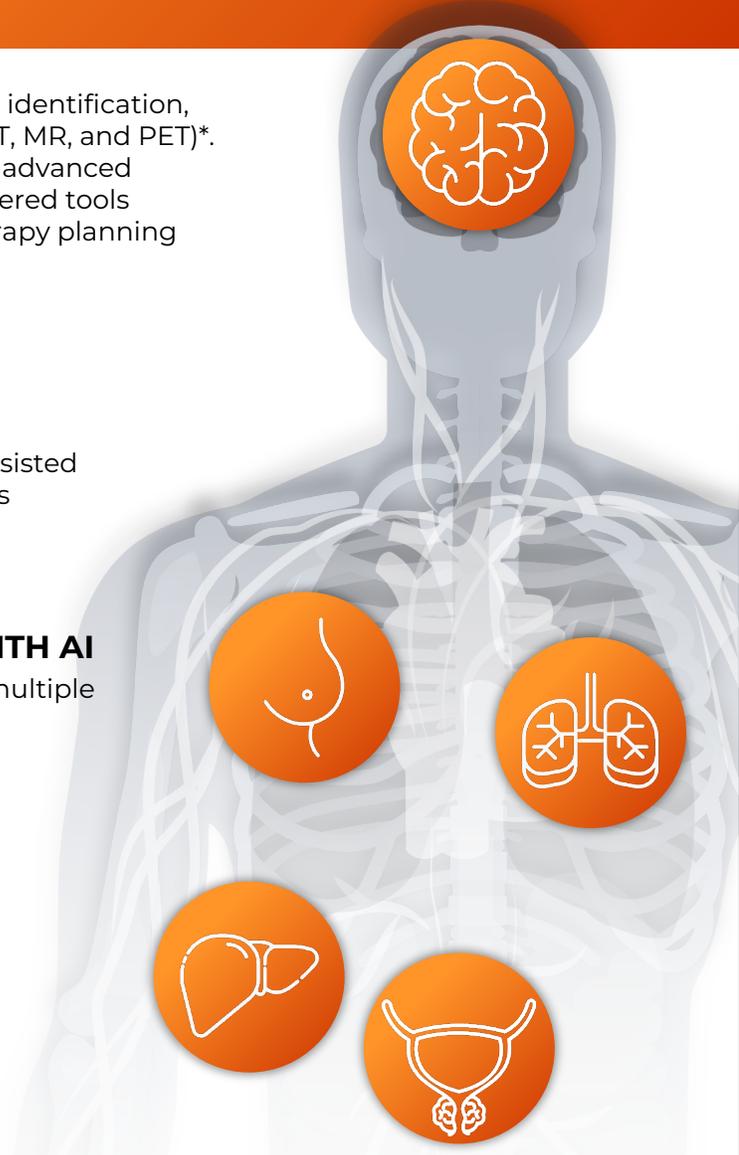
*Enabled through third-party AI and Mirada XD add-on
Functionality enabled through TeraRecon AV, and third-party AI algorithms

CT BODY

- Organ volume and histogram output
- Dynamic data support
- Sphere-like structure identification
- Dynamic image filtering
- Dual-source data support
- Colon flythrough

MR BODY

- 2D, 3D, 4D MR image sequencing
- MIP and MRA evaluation with centerline tools
- Analysis and follow-up tools
- Time-intensity ROI analysis
- Parametric mapping of body parts such as breast or prostate
- Kinetics, time-to-peak, time to the enhancement and maximum slope evaluation

BODY FUSION

- Rigid/deformable image fusion with Mirada XD
- Motion correction and subtraction
- SUV, mean, min, max, SD metrics
- Multi-timepoint comparison and ROI tracking
- PET/CT to MR registration
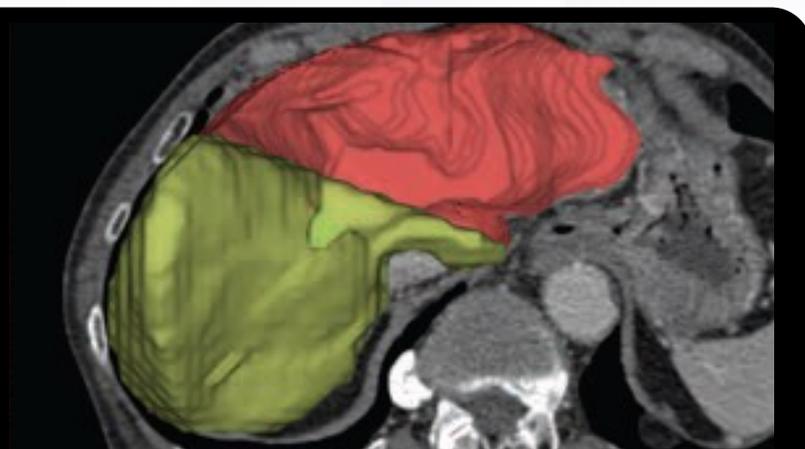
LIVER SEGMENTATION

- Semi-automated liver and lobular segmentation
- Lesion volume and vascular distance measurements
- Vascular classification and centerline tools
- Multi-cut options for pre-surgical planning
- Dynamic filtering with adjustable strength settings

TeraRecon MSK

VERTEBRAL LABELING WORKFLOW

- One click center line creation
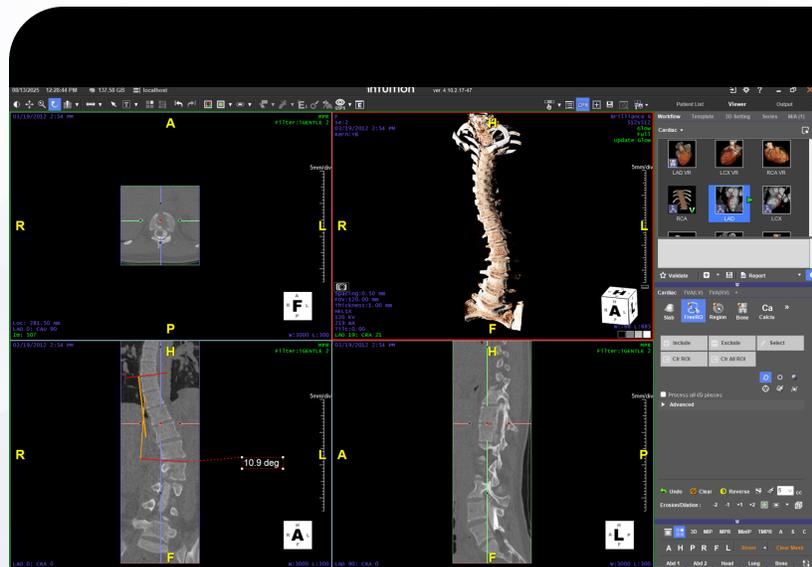- True axial
- Coronal reformats
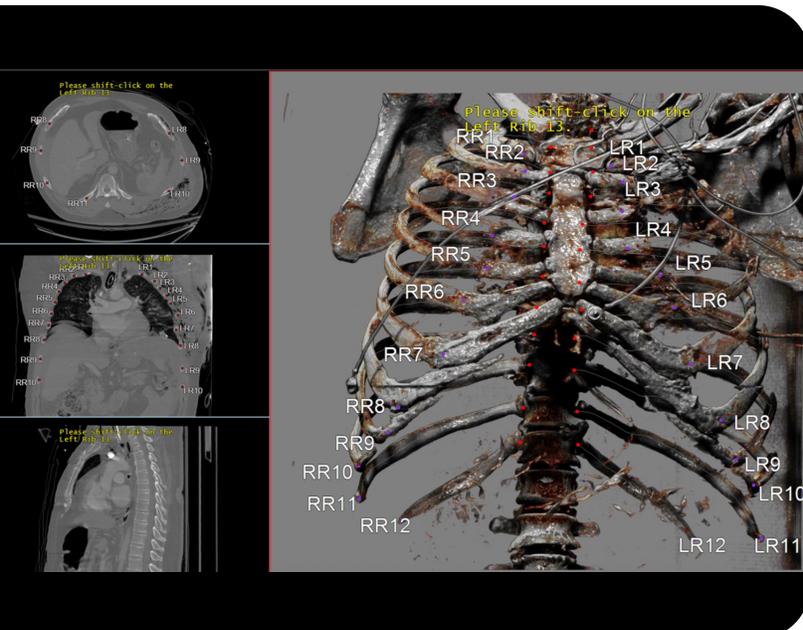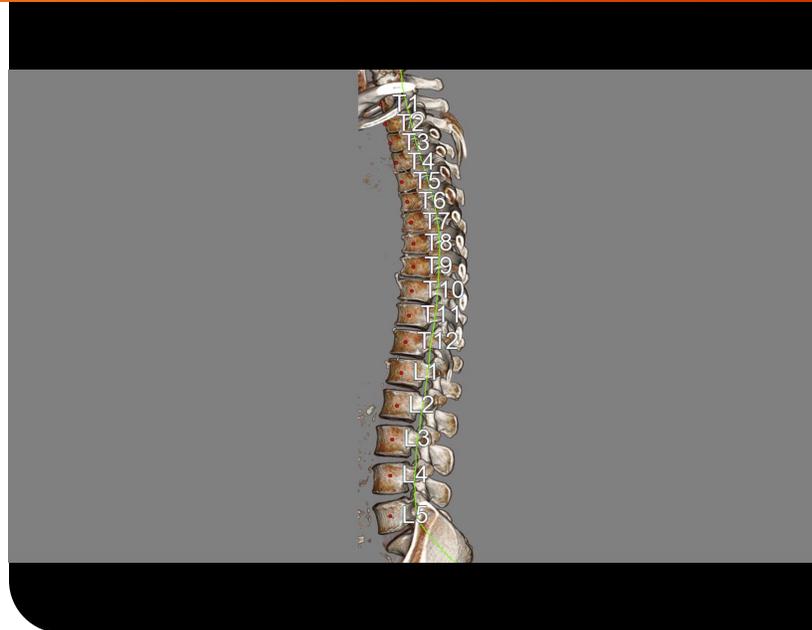
RIB LABELING WORKFLOW

- Rib Labeling
- Centerline generation
- Fishbone image display
- Efficient fracture detection and evaluation

ALIGNMENT MEASUREMENTS

- TT-TG measurement
- Cobb angle measurement

TeraRecon CARDIOLOGY
Assess & Plan Interventions with a Comprehensive Toolkit

TeraRecon CARDIOLOGY offers a comprehensive toolkit across CT and MR for evaluating cardiac anatomy, function, and flow – plus specialized workflows for structural heart procedures like TAVR, TMVR, TTVR, and LAA. Automated vessel segmentation, territory mapping, and calcium scoring improve efficiency while ensuring planning accuracy. Integrated geometry simulation tools and structured reports support confident intervention-ready decisions.

FASTER CARDIAC CT INTERPRETATION
- AI streamlined segmentation
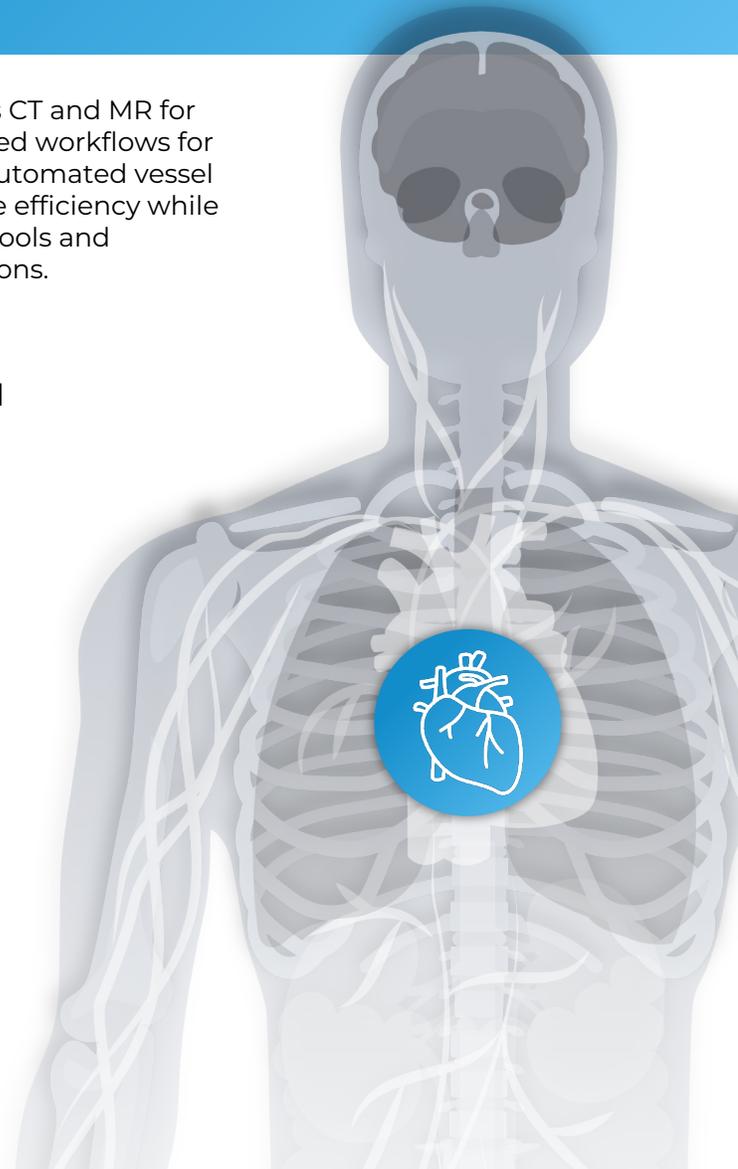- Calcium scoring and plaque detection

ENHANCED CARDIAC MR
- Blood flow analysis
- Cardiac segmentation and measurements
- Supports assessment complex valve disease and cardiomyopathies

INTEGRATED TREATMENT PLANNING
- Combining AV and AI
- Plan interventions like TAVR, LAAO
- Drives physician accuracy and confidence

AI ENABLED CLINICAL WORKFLOWS

- Automatic Ca Scoring (Coreline Soft - AVIEW)
- Echocardiographic Assessment (Us2.ai - us2v1)
- Predictive Modeling (FEops - HEARTguide)
- AI-Driven Triaging (Avicenna – CINA CHEST PE/AD)

CUSTOMER BENEFITS

- Reduced interpretation time
- Enhanced pre-procedure planning
- Operational efficiency

Functionality enabled through TeraRecon AV, TeraRecon Aorta.CT, TeraRecon Cardiac.Chambers.MR and third-party AI algorithms.

Functionality listed on this page is enabled through a combination of license keys noted on prior pages. It is meant as an illustration of the depth of the portfolio. The specific capabilities of your solution may differ depending on the purchased configuration.
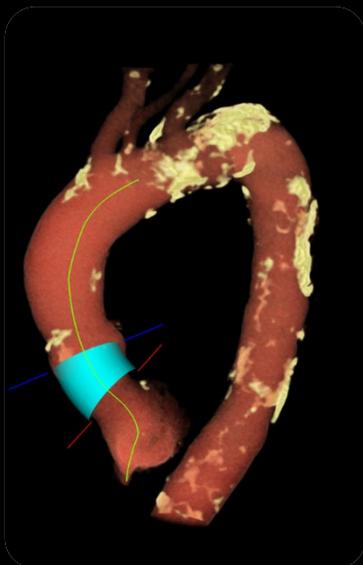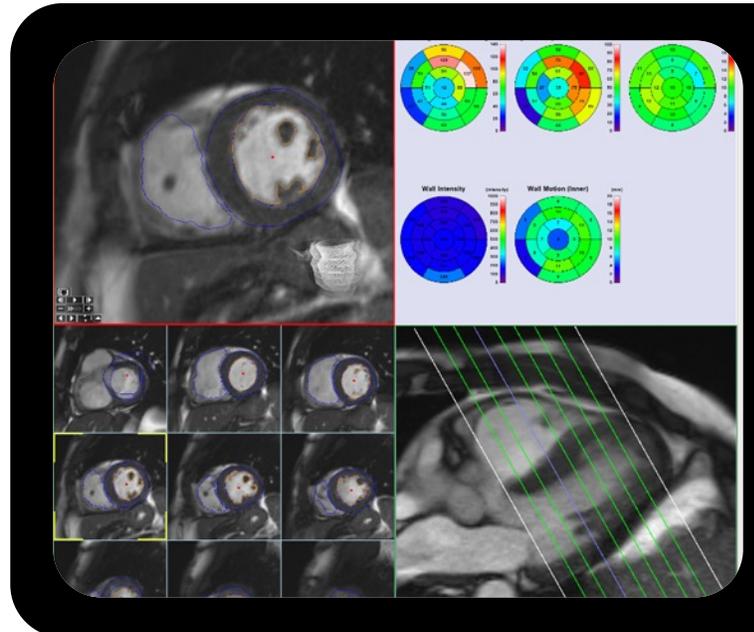
TeraRecon CARDIOLOGY
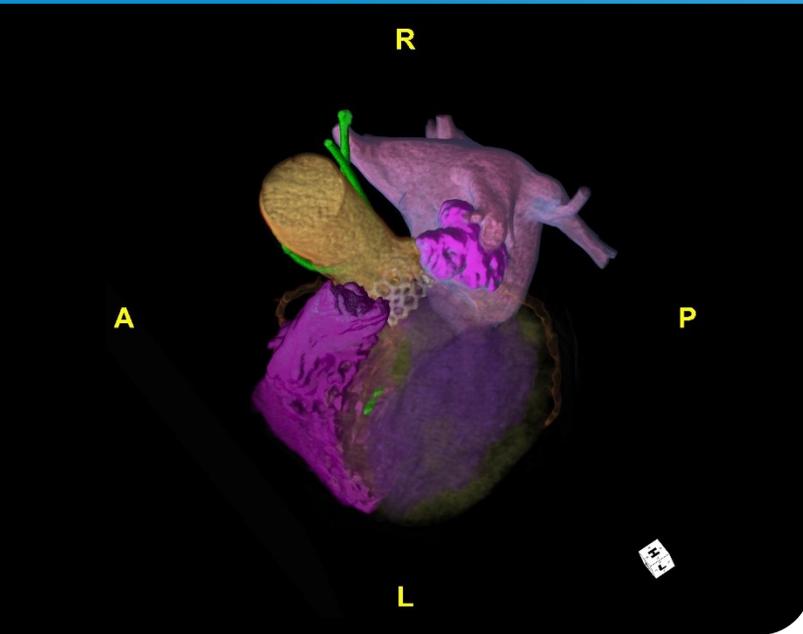
CARDIAC CT

- Cardiac structure segmentation and functional analysis
- Automated centerline creation and vessel segmentation
- Calcium scoring with multiple database options
- Atrium and pulmonary vein analysis for EP planning
- Pre-operative evaluation of coronary arteries for plaque and stenosis
- Embedded geometry for pre-operative virtual stent evaluation

CARDIAC MR

- Dedicated CMR Viewer
- Automatic Short Axis Contouring[1]
- Longitudinal Strain Analysis
- Volumetric analysis of ejection fraction
- LV/RV inner and outer contour detection
- T1, T2/T2*, ECV Mapping
- AHA17-segment-model
- MR flow analysis
- Semi Quantitative MR cardiac perfusion

[1]Functionality requires TeraRecon Cardiac.Chambers.MR distribution.

TAVR WORKFLOW

- Aortic root segmentation and orientation
- Centerline pre-processing and extractions
- User-definable planning template
- Report output
- Automatic Measurement Protocols

TeraRecon CARDIOLOGY Continued

MITRAL VALVE (TMVR) WORKFLOW

- Guided TMVR workflow
- Optimized cardiac orientations for the mitral valve
- 2-, 3-, & 4-chamber view as well as oblique mitral valve view
- Key measurements include trigone-to-trigone distance (TT), septal-to-lateral (SL) distance, intercommissural (IC) distance measurements
- Saddle-shape or D-shape options
- Aortomitral angle measurement
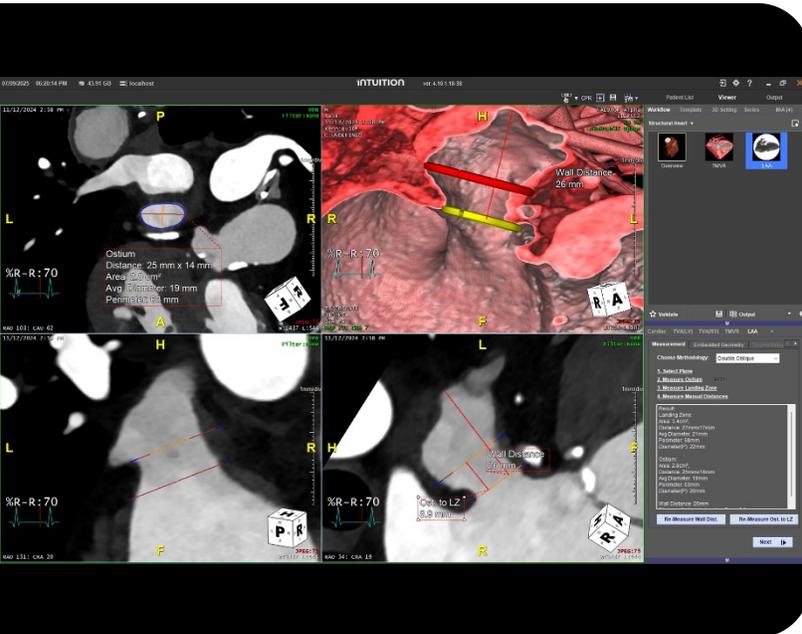
LEFT ATRIAL APPENDAGE (LAA) WORKFLOW

- Guided LAA workflow
- Optimized cardiac orientations for the LAA
- Key measurements include landing zone, wall depth, ostium, c-arm angle, and compression measurements
- Embedded device simulation with compression percentage
- Fluoroscopy view with measurements and device
- LAA report with measurements and captured images

TTVR

- Tricuspid valve analysis: with calcium scoring
- Advanced 3D modeling: IVC/SVC structures
- Semi-automated calculations: distances and angles
- TTVR simulation: catheter placement
- Valve leaflet 3D visualization for simulation
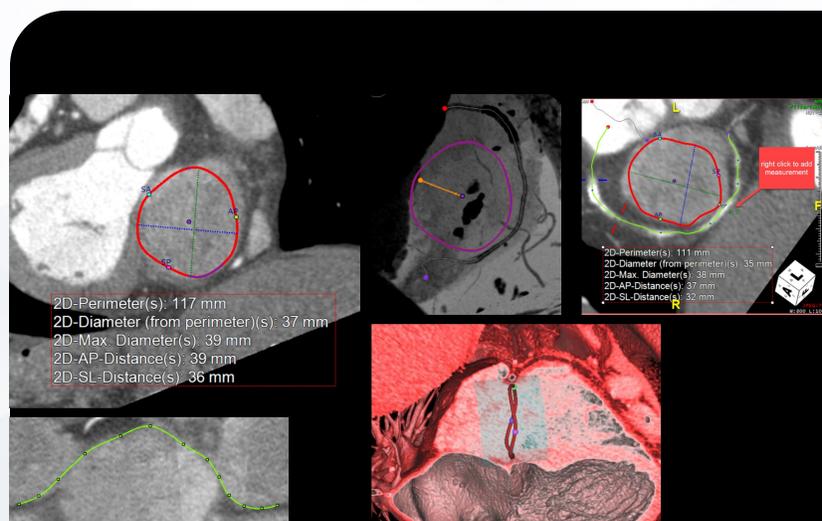
TeraRecon PULMONOLOGY
Reliable Tools to Aid in Addressing Pulmonary Disease

TeraRecon PULMONOLOGY supports automated lung segmentation, density analysis, and airway evaluation for both acute and chronic pulmonary disease management. Tools like virtual flythrough, sphere detection, and longitudinal tracking streamline early diagnosis and treatment monitoring. AI-enhanced segmentation and multi-timepoint comparisons help improve clinical confidence and workflow efficiency.

AI-ASSISTED LUNG NODULE DETECTION
- Automatically flag potential nodules
- Enables assessment of disease progression
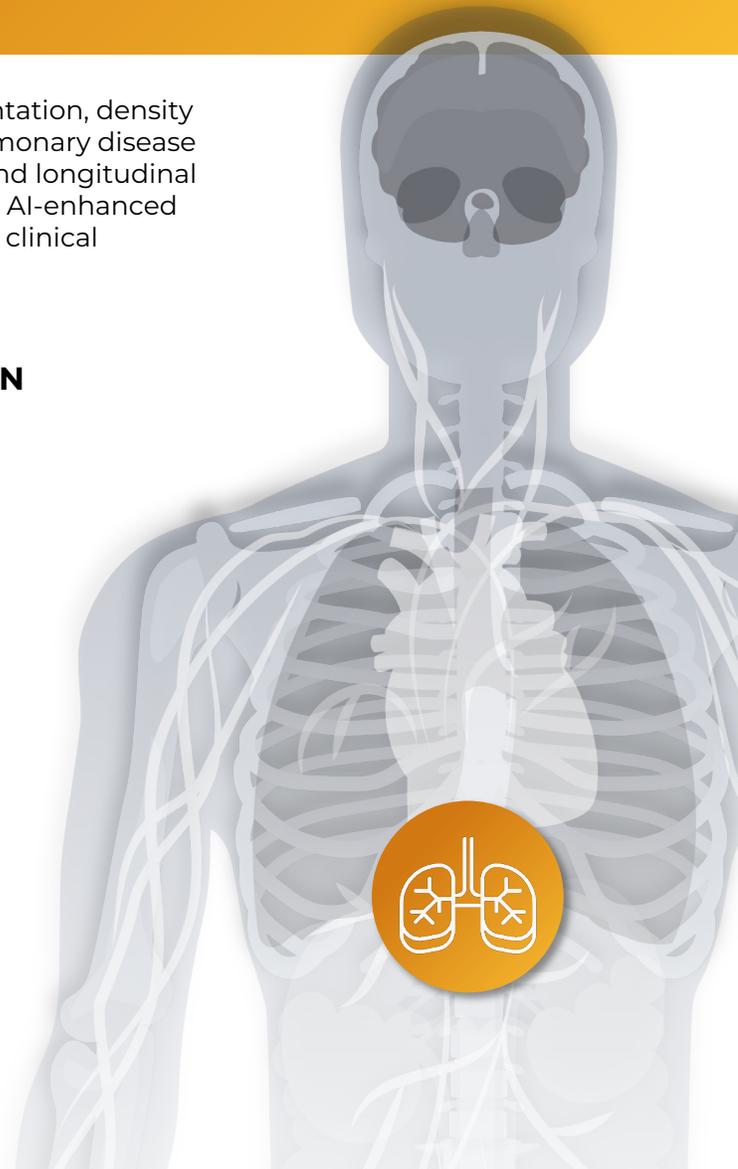- Streamlined lung cancer screening

ADVANCED AV FOR COPD AND ILD
- Aid in the diagnosis and monitoring of chronic obstructive pulmonary disease and interstitial lung diseases

STREAMLINED LUNG WORKFLOWS
- Automatic Lobar lung decomposition
- Lung density analysis

AI ENABLED CLINICAL WORKFLOWS

- Uncovering incidental findings (Avicenna's CINA-iPE)
- Lung nodule detection (Riverain, Infervision, Coreline)
- Quantitative lung analysis (ClariPi, Coreline)
- AI-driven triaging (Avicenna's CINA-CHEST)

CUSTOMER BENEFITS

- Diagnostic Support
- Streamlined workflows
- Precise planning for interventions
- Faster decision making & better patient management

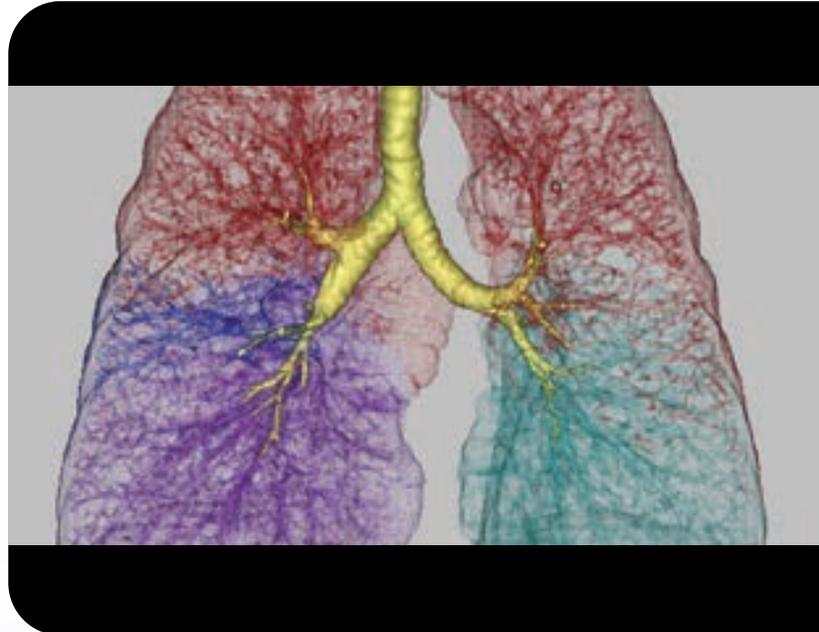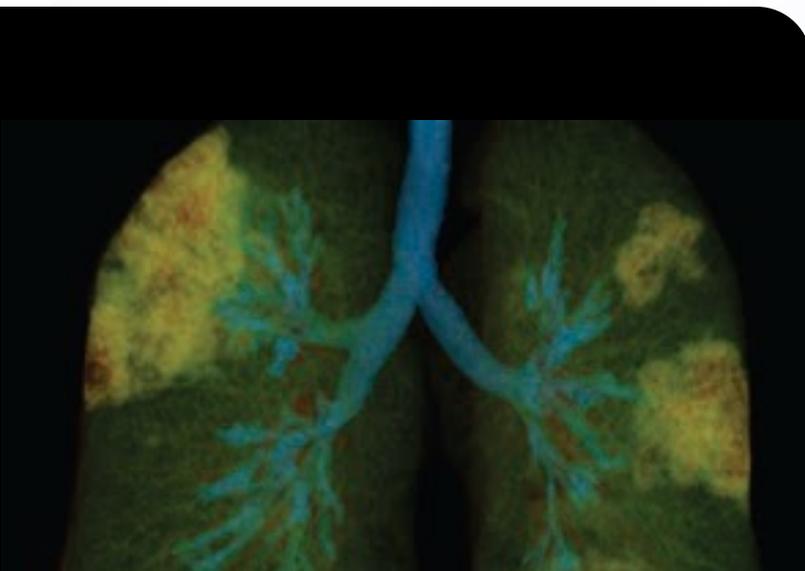Functionality enabled through TeraRecon AV, and third-party AI algorithms
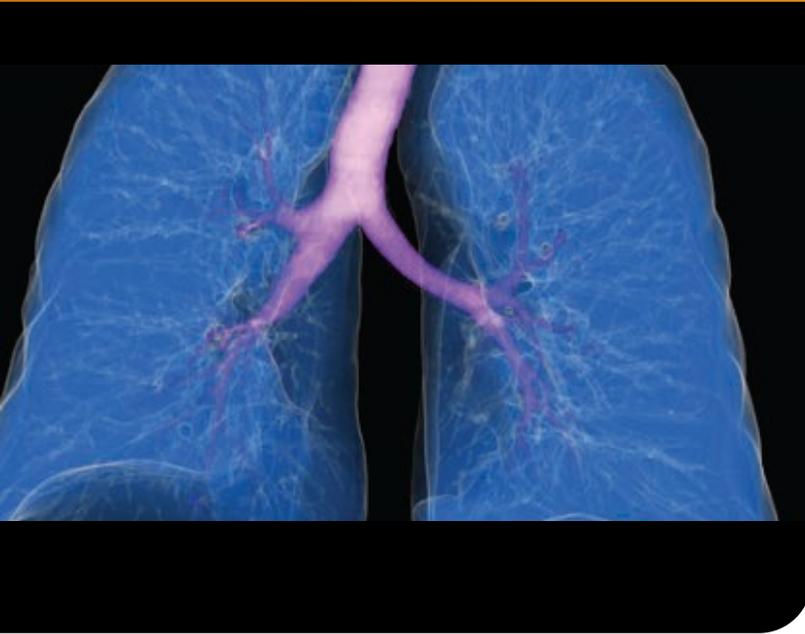
CT CHEST

- Semi-automated lung segmentation
- Lung volume and histogram analysis
- Sphere-like structure identification
- Comparative tracking-over-time options
- Virtual flythrough
- Rib Labeling

LUNG SEGMENTATION

- Lung and trachea segmentation
- Lung and lobe volumetric analysis
- Lung, airway, and vessel anatomical fusion
- Treatment planning simulation
- Low attenuation

LUNG DENSITY ANALYSIS II

- Automated lung segmentation
- Lung volume and histogram analysis
- Sphere-like structure identification
- Comparative tracking-over-time options
- Virtual flythrough
- Rib Labeling

15

TeraRecon VASCULAR
Informed Diagnosis & Planning for Complex Situations

TeraRecon VASCULAR delivers automated centerline extraction, cross-sectional vessel analysis, and pre-configured planning templates for EVAR and other complex vascular procedures. Embedded geometry and vendor-specific reporting streamline graft sizing and intervention planning. Integration with interventional radiology tools enables seamless follow-up, stent-graft planning, and endoluminal evaluation.

AI-ENHANCED DETECTION
- AI-driven segmentation of vascular anatomy
- Labeling and identification of key landmarks
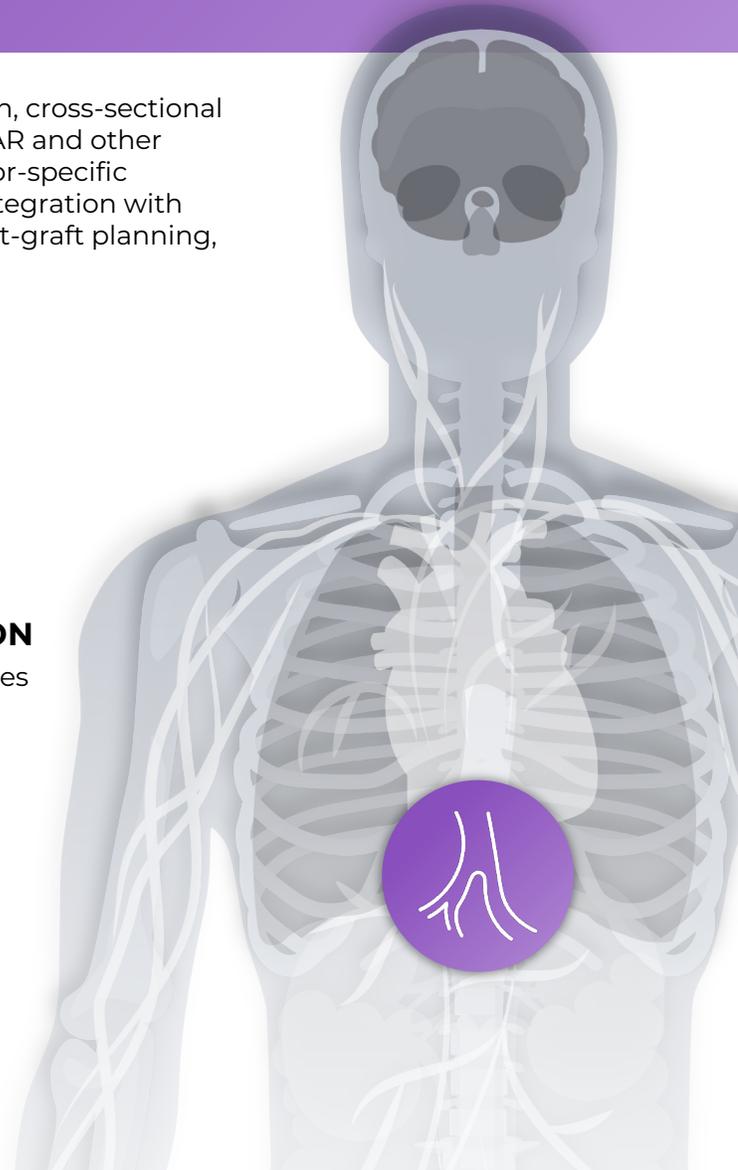
3D POST-PROCESSING & VISUALIZATION
- Advanced reconstruction of complex anatomies
- Enhance preoperative planning

DEDICATED EVAR WORKFLOW
Automate preoperative planning for:
- EVAR and fenestrated repair
- Facilitate user's in-depth anatomical analysis for stent grafting

AI ENABLED CLINICAL WORKFLOWS

- TeraRecon Aorta.CT AI*
- AI-driven Triaging (Avicenna's CINA CHEST PE/AD)

CUSTOMER BENEFITS

- Automated segmentation & labeling
- Enhanced planning for interventional procedures
- Single, cohesive AI-enabled AV solutions

Functionality enabled through TeraRecon AV, TeraRecon Aorta.CT, and third-party AI algorithms.

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TeraRecon VASCULAR

EVAR WORKFLOW

- Pre-generated centerlines
- User-definable planning template
- Diameter vs. distance and cross-sectional views
- Straightened view, diameter, and length measurements
- Embedded vendor-specific report templates
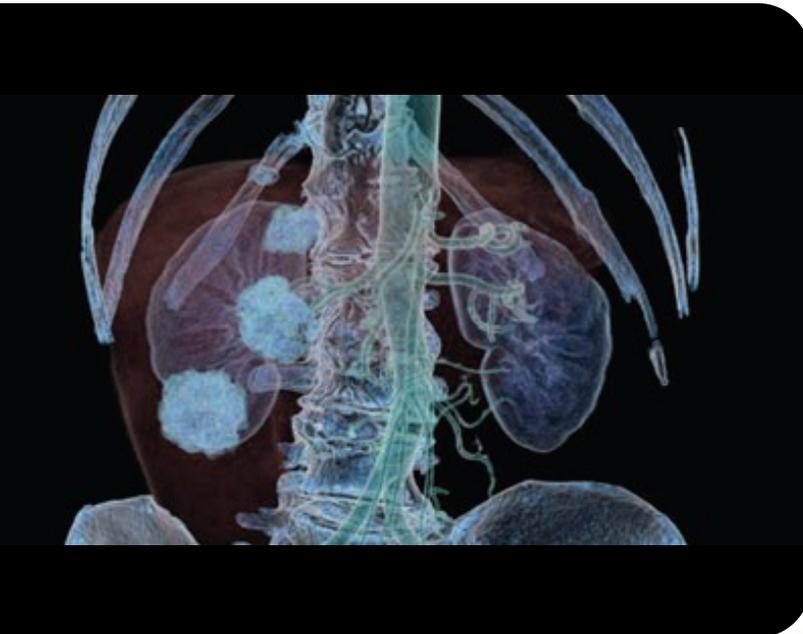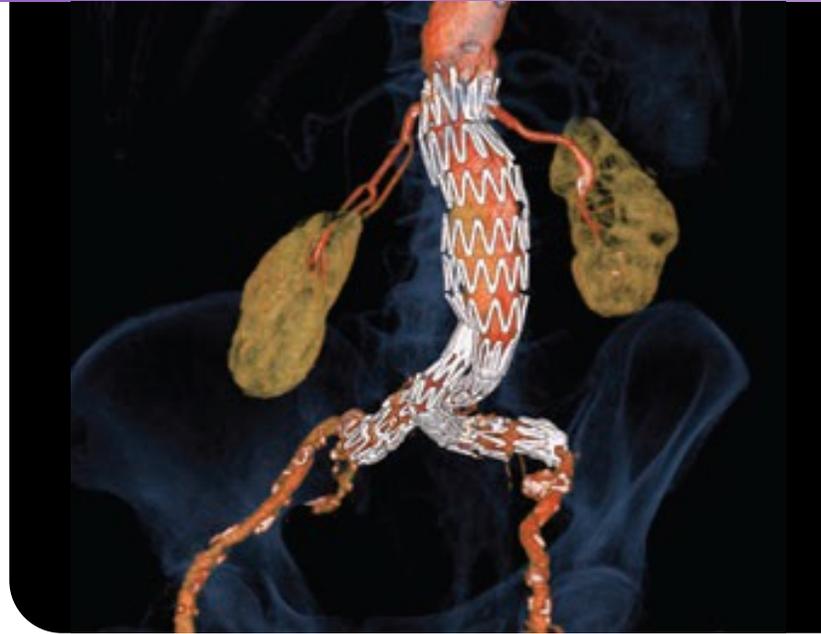
INTERVENTIONAL RADIOLOGY

- Centerline analysis tools
- Stent-graft planning
- Curved planar reformation
- Analysis and follow-up tools
- Perspective flythrough

TERARECON AV™

Leveraging the Power of AI

ConcertAI is leading the way in advanced medical imaging, leveraging integrated AI-driven automation to enhance diagnostic precision and streamline workflows. TeraRecon AV is built on a secure, scalable cloud infrastructure, it integrates seamlessly into your imaging enterprise, providing specialized tools for cardiology, oncology, and more. As a platform for the future, TeraRecon AV empowers healthcare teams to make faster, more confident decisions while improving operational efficiency.

Helping you provide faster, more confident diagnosis

ConcertAI

All offerings are subject to availability and regulatory clearance, which may vary by country. Please verify product status with your local TeraRecon representative. TeraRecon AV is registered as Intuition in global markets.