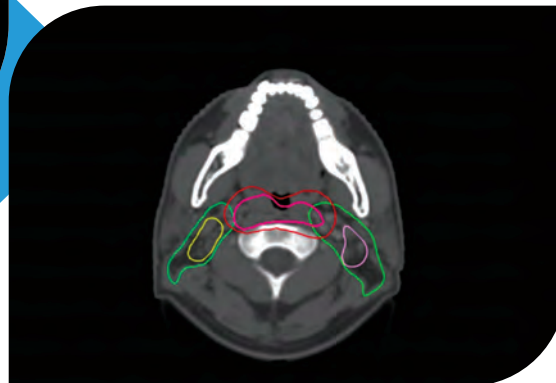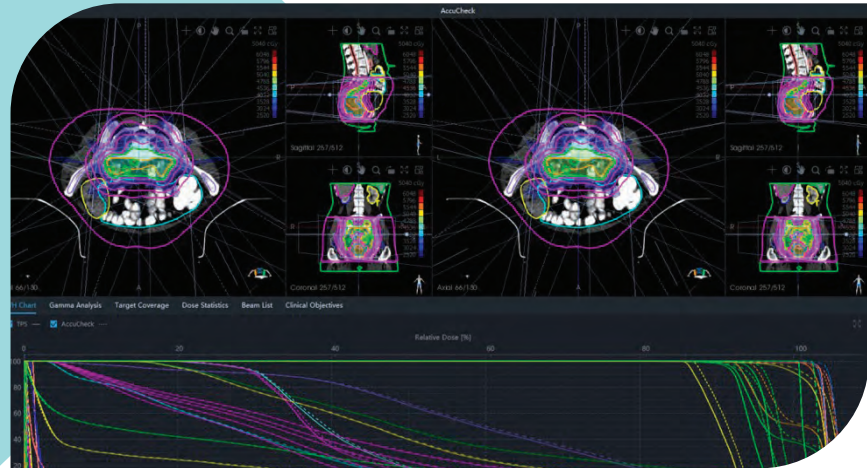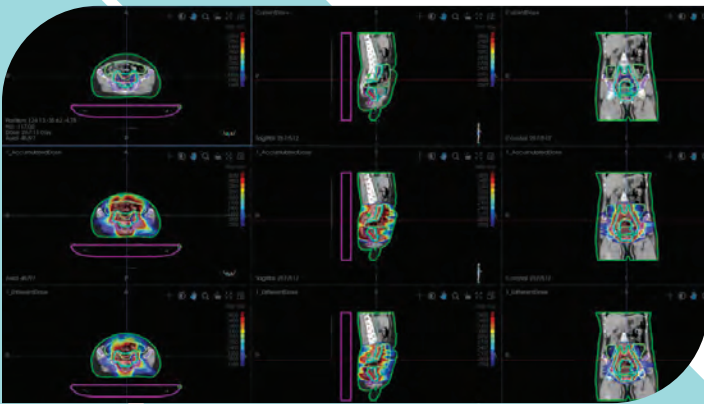# Klarity®

# Intelligent Oncology
## Software Suite

**Creating an intelligent, therapeutic ecosystem through AI and advanced algorithms to enhance the delivery of data-driven precision care**
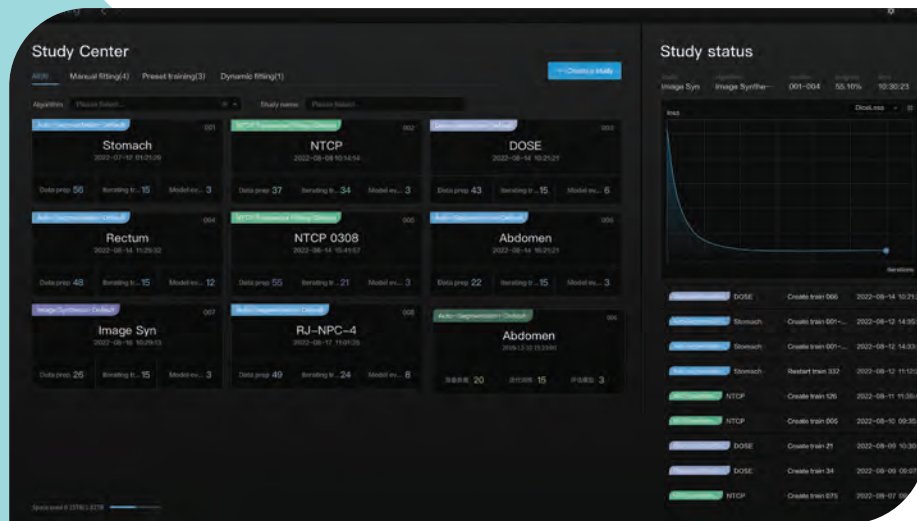
# Klarity AccuContour®
POWERED BY MANTEIA

## Intelligent Treatment Planning Assistant

AccuContour is the first auto segmentation by deep learning, and also features unique MR compatibility. Along with our unparalleled AccuLearning and AccuCheck modules, discover how AccuContour can transform your workflow today.

- Auto-Contouring
- Fusion & Registration
- Dose Accumulation
- Plan Review & Comparison



# Klarity AccuLearning®
POWERED BY MANTEIA

## AI Model Training Platform

AccuLearning allows you to train standard models utilizing your own data sets to create custom contour models.

AccuLearning is an add-on to AccuContour that is especially useful as an educational platform to help support standardization initiatives and personalized protocols.

- AI Segmentation Training
- Adaptive MR Linac Training
- Data Validation



# Klarity AccuCheck®
POWERED BY MANTEIA

## All-in-One Patient-Centric QA System

AccuCheck provides vendor-independent and unbiased Quality Assurance (QA) throughout the entire treatment process, offering data integrity, parameter consistency, plan dosimetry quality checks and independent MU calculation within a single platform.

- Monte Carlo Dose Second Check
- Treatment Check with Log Files
- MR-Linac Magnetic Field Correction

# Klarity AccuContour®
POWERED BY **MANTEIA**

**Intelligent Treatment Planning Assistant**

**AccuContour is a full spectrum auto-contouring platform that has everything you need and nothing you don't**

## User-Friendly Design
AccuContour is user-friendly with no steep learning curve. Start within minutes to increase efficiency and accuracy in daily workflow

## System Integration
- Easily installed on your local Windows workstations for the utmost data security
- CPU-only workstation can also perform AI calculations
- Fully compatible with Varian Eclipse v15+ as a TPS plug-in
- Operates as standalone, client and servers, CITRIX or cloud-based deployment

## Customization
AccuContour is easily customizable, including naming conventions, colors, and contouring standards through the use of templates

## Comprehensive Components
From auto-contouring, registration, dose analysis to plan review, users can select the modules they need to complement their current TPS

### Efficiency

**1 Minute** **VS** **1–4 Hours**

Auto-Contour and Data Transfer — Manual Contouring

### Automation

**Auto-import and preload** **VS** **Manual Import**

(of patent data)

Fully Automated CT/MR-AccuContour-TPS workflow
One click to operate multiple steps in one customized workflow

### Multiple Workflow Options

**Fully Automated, Semi-Automated, Manually Selected, Eclipse API, and Online ATS with the Unity Linac**

Auto-Import          Auto-Export

CT/MR DICOM Export → AccuContour → TPS/File Folder

## Modular System

**Module 1: Auto Contouring**

**Module 2: Fusion & Registration**

**Module 3: Dose Accumulation**

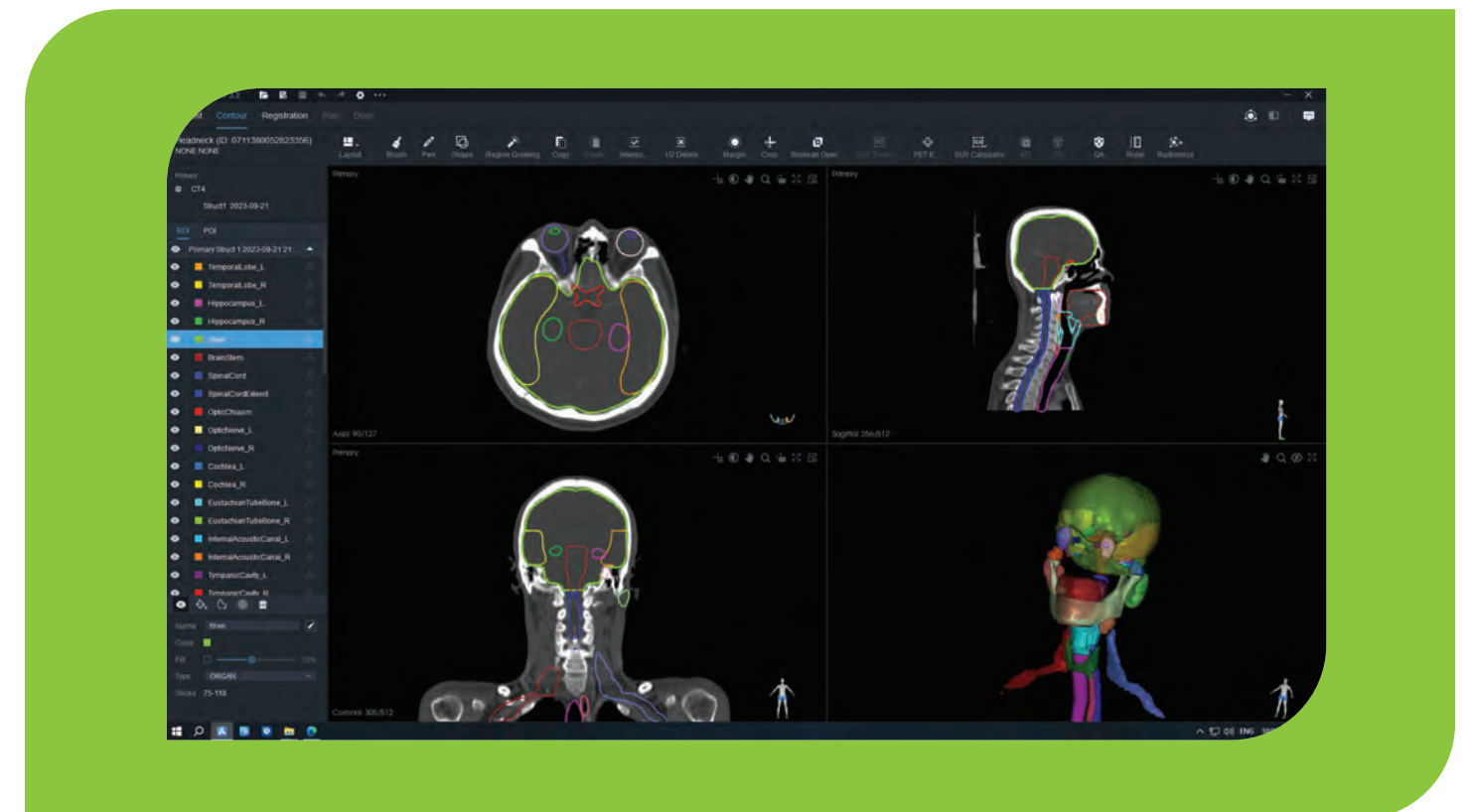**Module 4: Plan Review & Comparison**

**Module 5: AccuLearning™**

**AccuContour's Modules can be completely customized for your clinic's individual needs.**

**Modules 1 and 5? Done.**

**Modules 2-4? Easy.**

No need for FOMO.
You can always add on later.

# The Modules

## AccuContour Module 1
## Auto Contouring
CT/MR compatible



### Validated Accuracy
### by Over 1000 Clinics

AccuContour has been validated and used in daily clinical workflow by over 1000 radiation therapy centers worldwide.

### Contour Library Ready to Go

- 200+ Organs at Risk
- 20+ Tumor Targets
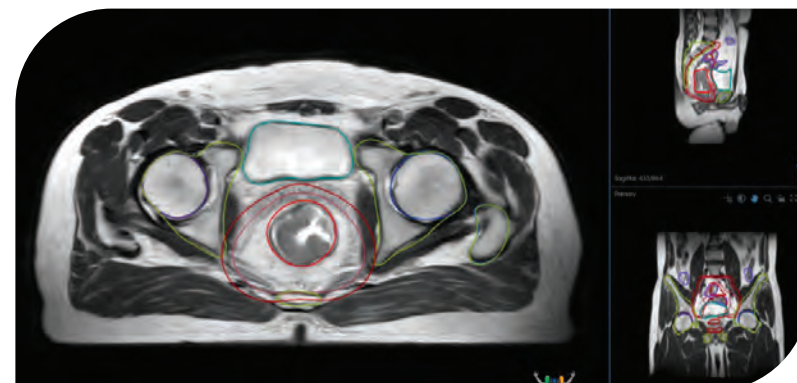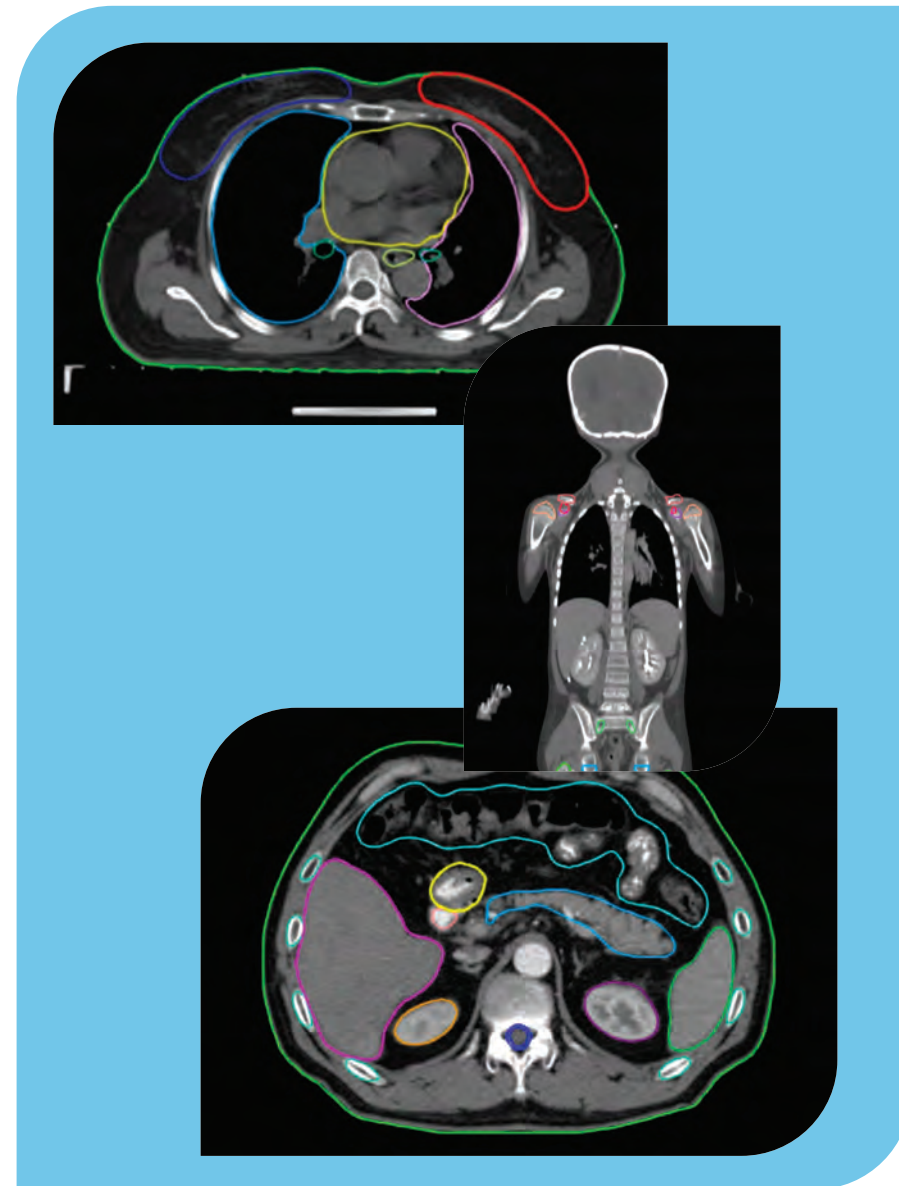- Endless Contour Possibilities with **AccuLearning**

### Comprehensive
### Compatibility

Full spectrum of populations, ages (pediatric & adult), genders and CT-Simulators, as well as multiple contour models for user selection

### MR-Linac Contouring Solutions

AccuContour supports MR-Linac online auto-contouring for all cancer types and MR modalities

## AccuContour Module 2
## Fusion & Registration

### Multiple Image Modalities

CT/CBCT/MRI/PET-CT/4DCT/4DMR/SPECT and others

### Rigid Images Registration (RIR)

- Automatic and manual editing
- 4D-image improvements
- Shared frame of reference grouping
- ITV/MIP generation
- Motion tracking
- Structure transfer
- Structure analysis tools

### Deformable Images Registration (DIR)

- Deformable images registration in 10s
- Deformed structure analysis
- Deformed registration QA
- Deformed dose display
- Deformed structure transfer
- Deformed field export
- 4D-images one-click deformed registered

### Multiple Registration Methods

- Register with full images, with selected region and with ROI/POI

### Seamless Experience
### with your TPS

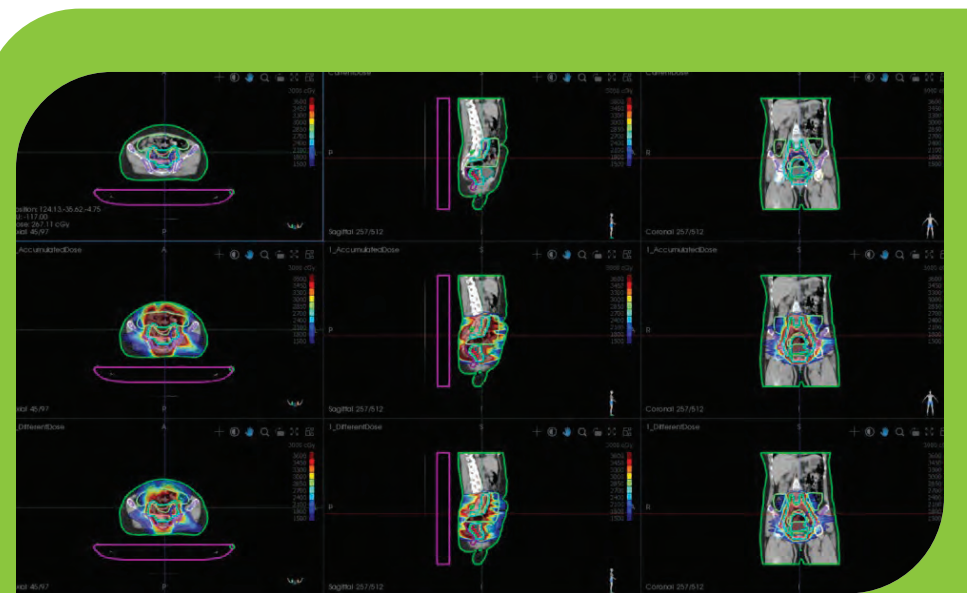- Registration results can be easily exported to your TPS
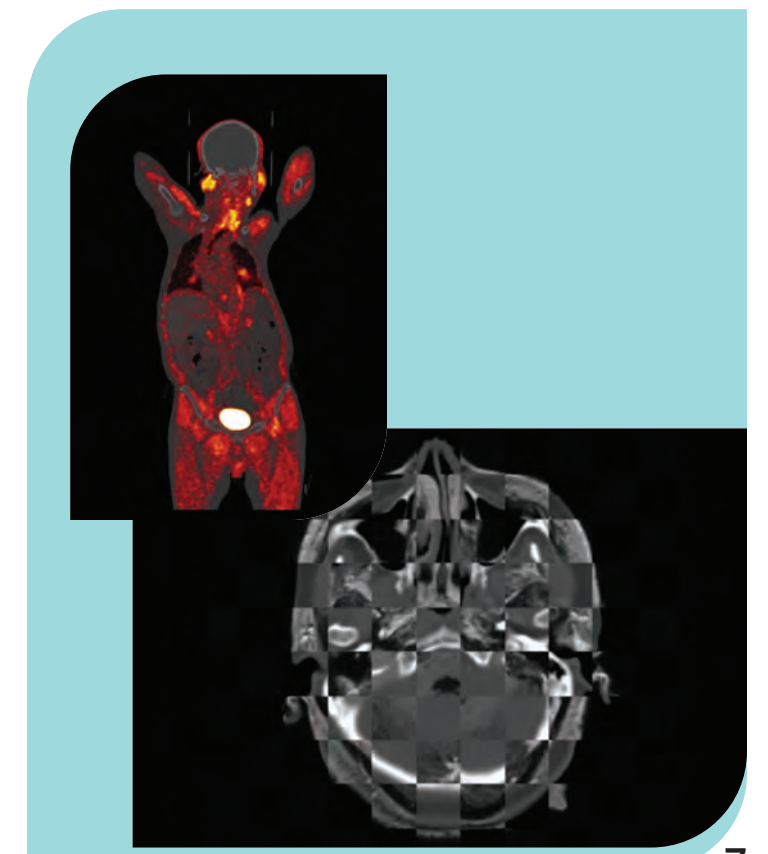
## AccuContour Module 3

# Dose Accumulation
Deformed dose analysis in customized workflow



**Perform the Following Treatment Analysis in One Click:**

- Replan Dose Accumulation
- Recurrent Patient Dose Accumulation
- External and Brachy Dose Accumulation
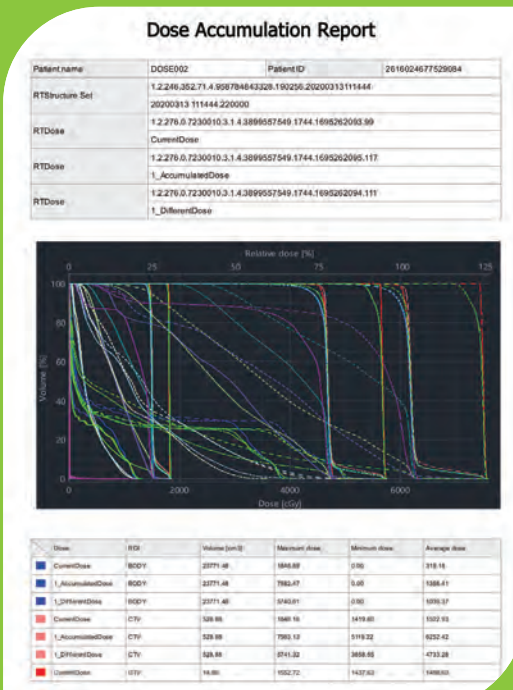- Online Adaptive Dose Accumulation

### Dose Accumulation

### Analysis

Analysis tools include DVH, dose summary and pdf report

### Biological Dose

### Conversion

BED/EQD2/TCP/NTCP models for improved dose change tracking due to biological factors
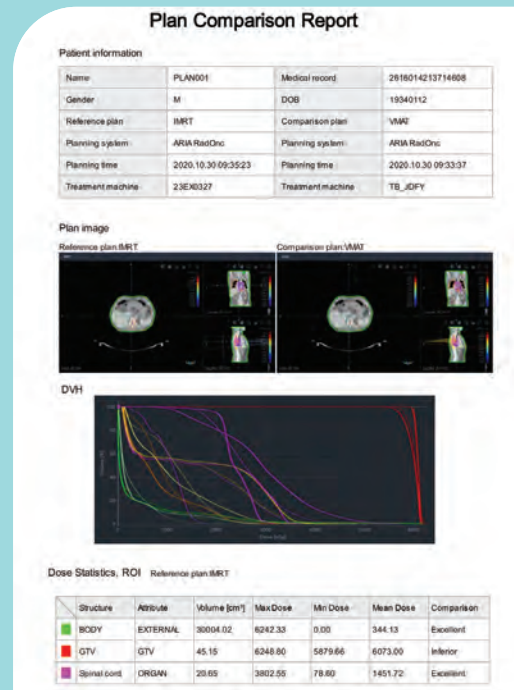


## AccuContour Module 4

# Plan Review & Comparison



### Plan Review and Dose Constraints Check

Supports 3D/IMRT/VMAT/ TOMO RT Plans dose constraint check in one click with an auto-generated pdf report

### Plan Comparison

Facilitates comparison of two RT plans across different techniques and TPS systems, enabling comprehensive analysis

# Klarity AccuLearning
### POWERED BY MANTEIA

## AI Model Training Platform

### Training Capabilities

- AI Contour Model Training (CT/MR)
- MRgRT Patient-Specific Contour Training
- Data Validation
- Training Strategy Adjustment
- Model Analysis with PDF Report

### No Programming Experience Required for AI Research

Supports 3D/IMRT/VMAT/TOMO RT Plans dose constraint check in one click with an auto-generated pdf report

### Minimal Data Requirement

20-30 cases for most studies, 50 cases for complex studies

### Highest Data Security

Local installation, no network required

### Transformation from Research to Application

Self-trained models can be shared among users and applied in any of our Software Suite systems

### Integrated Workflow with AccuContour

**Fully Automated, Semi-Automated, Manually Selected, Eclipse API, and Online ATS with the Unity Linac**

20-30 Data → AccuLearning → Your Own Model to AccuContour
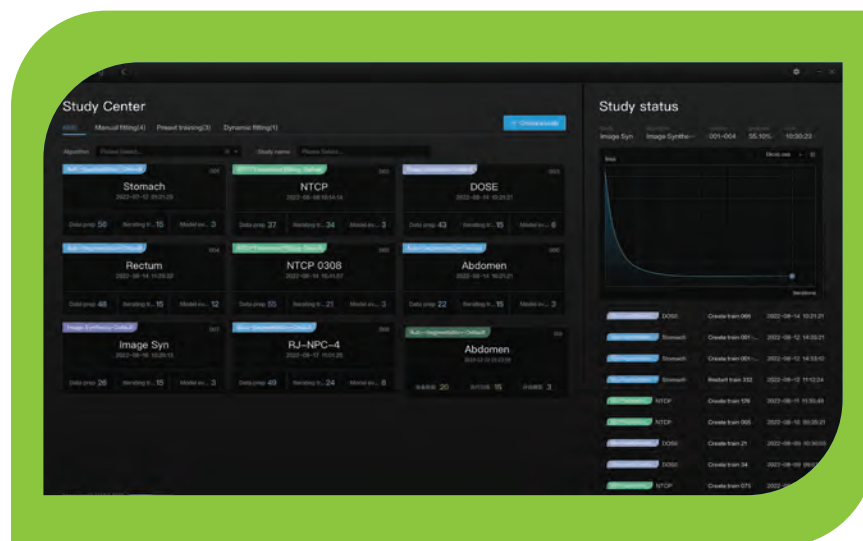


# Klarity AccuCheck
### POWERED BY MANTEIA

## All-in-One Patient-Centric QA System



### Main Functions

- Monte Carlo Secondary Dose Check
- Magnetic fields correction algorithm to eliminate the electron return effect (ERE) for MR Linacs
- Treatment Checks with log files
- Transfer Check for data integrity
- TPS and Linac parameter check for multi-vendor workflows, including Monaco, Pinnacle, RayStation and MOSAIQ

### Comprehensive QA

AccuCheck is a Comprehensive QA Platform offering an independent QA check system for the entire RT treatment

### Vendor Independence

Independent from manufactures for unbiased calculations

### Automation

Automated checks with instantaneous feedback and auto-reporting

### Multi-Scenario Support

Supported treatment techniques: 3DCRT/IMRT/VMAT/ART

Supported modalities: Linacs, MR-Linacs, Halcyon and Ethos

### Analysis Tools

AccuCheck offers multi-dimensional tools for analysis including:

- DVH
- Gamma Analysis
- Dose Coverage Statistics

### Treatment Checks

AccuCheck reconstructs the dose from the delivery pre-treatment plan on the original plan CT and directly compares it with the intended dose from the TPS to detect any potential errors.

AccuCheck also reconstructs the dose delivery by log files during the treatment, giving a direct comparison on the actual delivered dose to evaluate intra-fraction changes in the patient.

# Klarity

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