

# Features, Functions, and Specifications of Multimaging System

# Albira PET

## Industry Leading Resolution, High Sensitivity

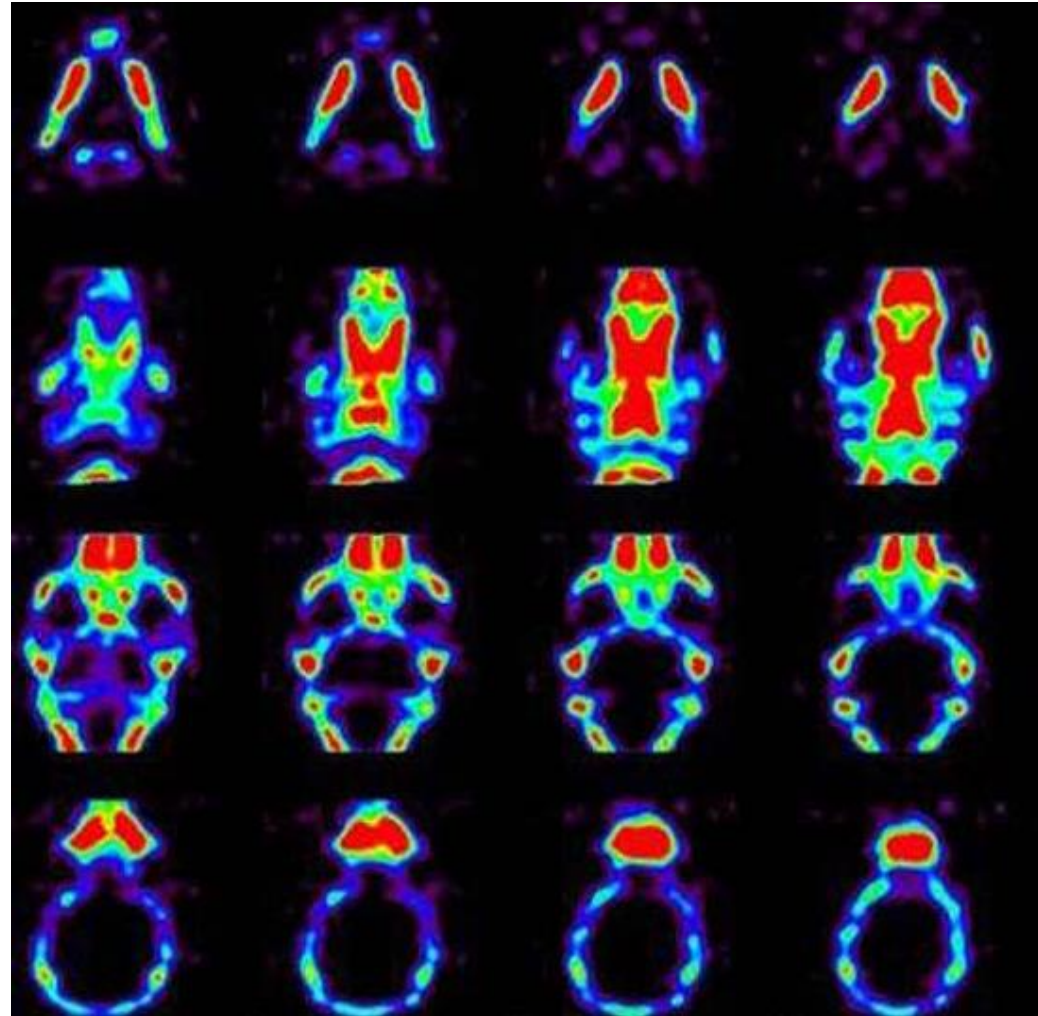
- Spatial resolution of  $<1.1$  mm (CFOV)
- Accurate measurement of DOI
- Sensitivity  $>9\%$  with 3 detector rings
- Average energy resolution of 14%
- Axial FOV up to 148 mm with 3 rings
- Full CT integration with automatic image fusion



# Albira SPECT

## Rapid and High Resolution

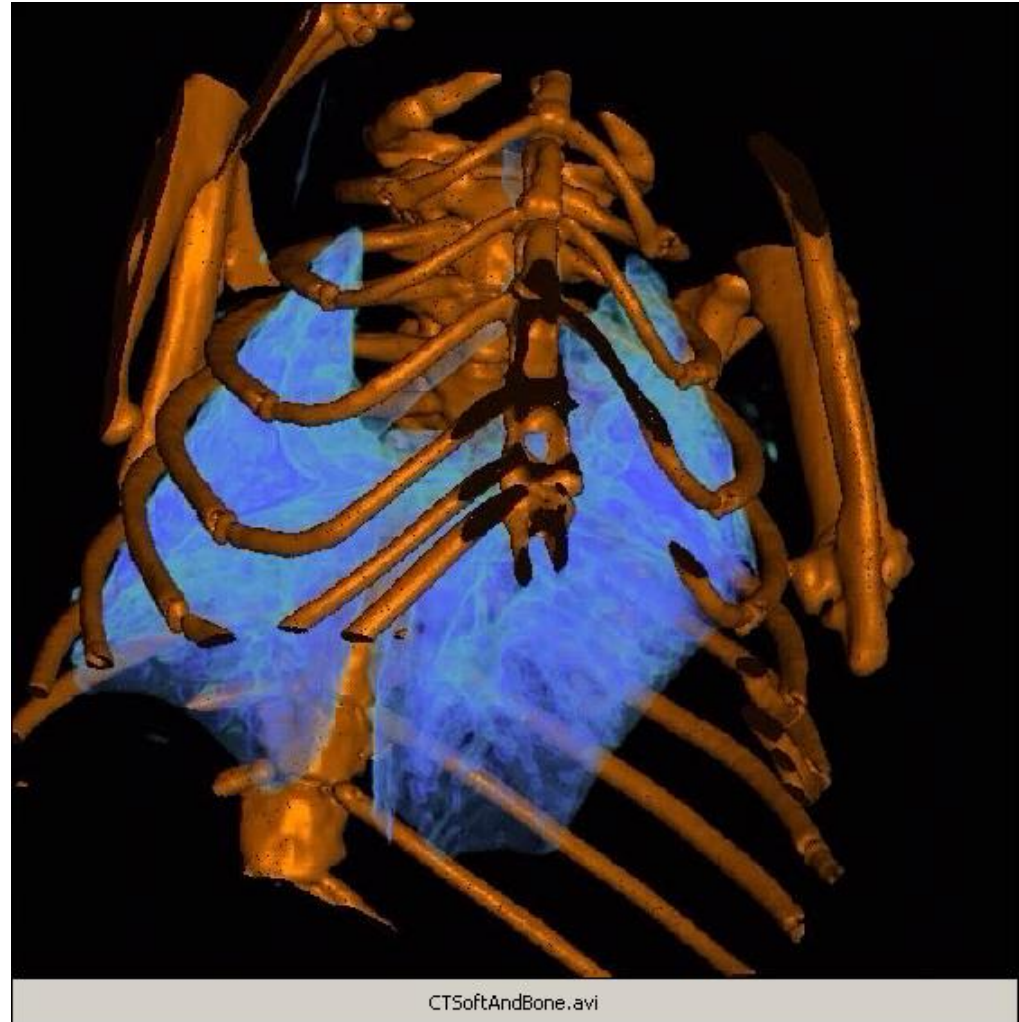
- Sensitivity of up to 1000 cps/MBq
- High spatial resolution of up to 0.6 mm
- Broad energy range: 30-400 keV
- Main energy resolution of 14% at 140 keV
- Acquisition times below 30 min with 60 projections
- Reconstruction times below 5 min



# Albira CT

## Accurate, Quantitative, Easy to Use

- Quantitative data presented in Hounsfield units for accurate CT measurements
- 10-50 kVp X-rays optimized for small animal imaging
- Spatial resolution up to 90  $\mu\text{m}$
- Transaxial and axial FOVs of 70 mm.
- Image reconstruction using the FBP (Feldkamp) algorithm within just 1 minute.



# Software Package

## Albira Suite

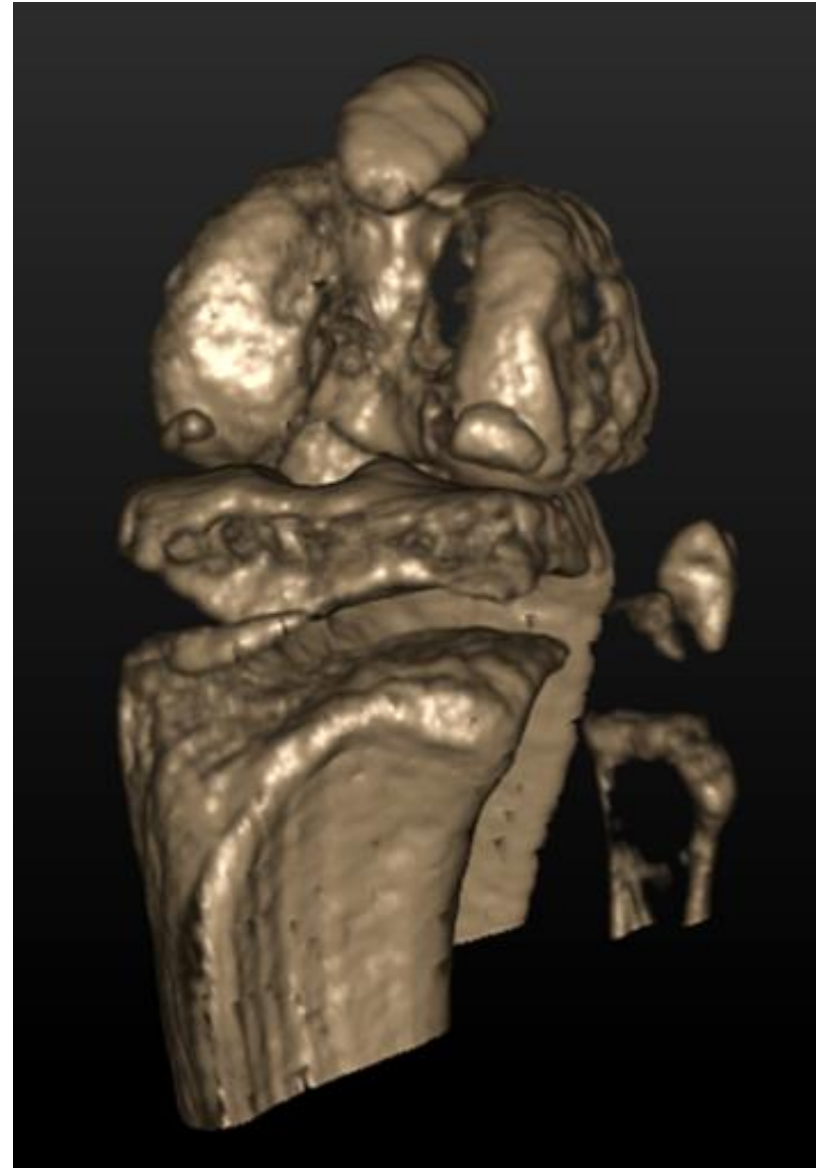
- Acquirer: data acquisition
- Reconstructor: 3D image reconstruction
- Manager: system configuration/ data administration
- Supervisor: system quality control and calibration

## PMOD

- Imaging viewing
- Quantitative VOI analysis
- Image fusion
- Kinetic modeling

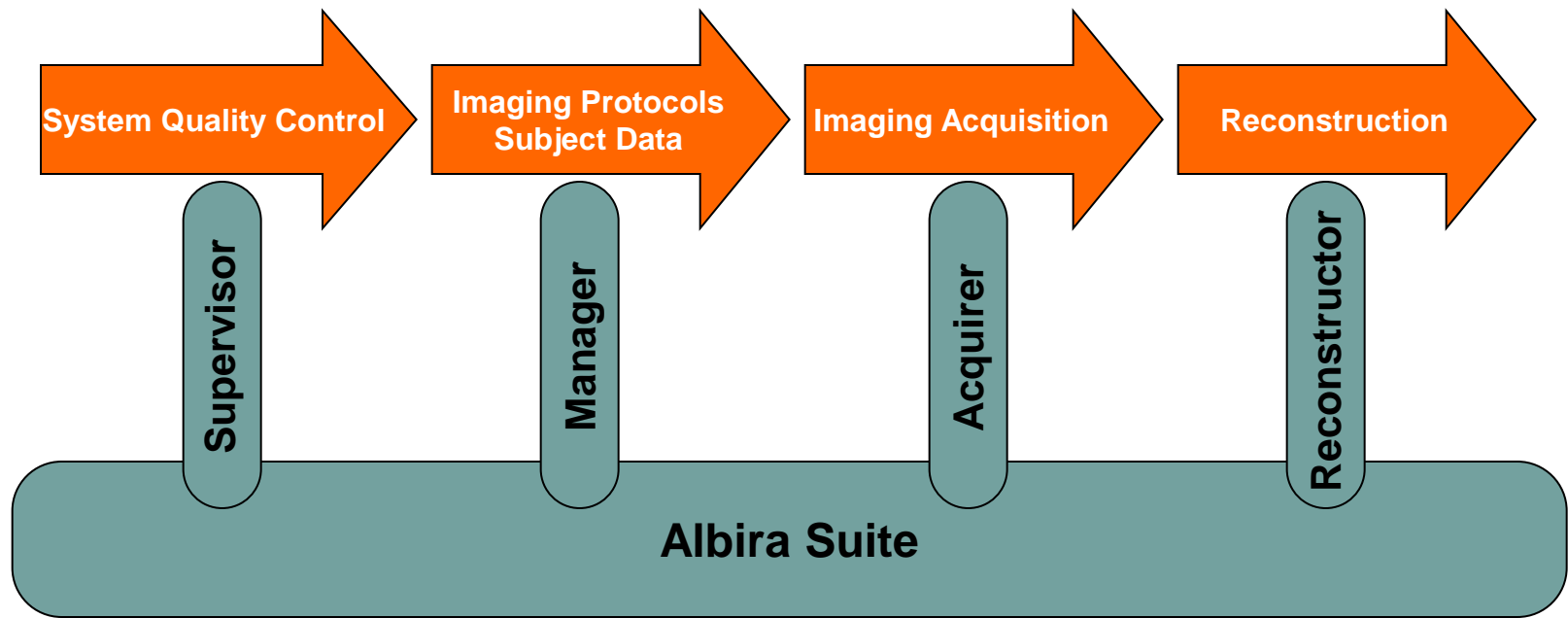
## VolView

- High quality rendering
- Simple multi-modal overlay

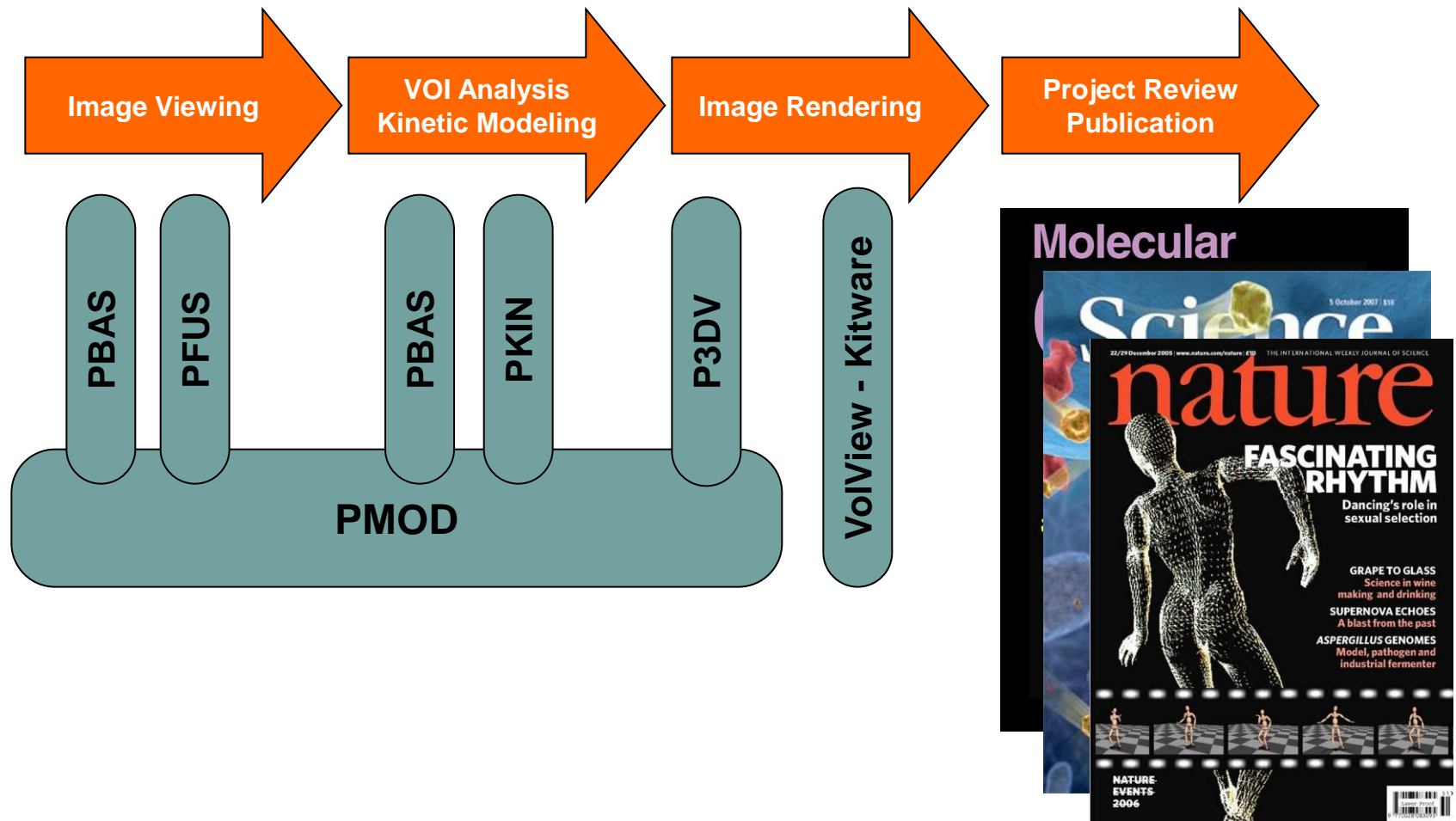


# Software for Complete Imaging Workflow


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# Software for Complete Imaging Workflow



# Albira - Acquirer

● System ON● CT OFF↻ Bed out✕

### Study

Study Code:  Researcher:  Protocol:

Study Name:

Study Description:

### Study Details

#### Subject

Subject:  Orientation:  Weight:

#### Compound

Compound:  InjectionTime:  Injection Date:  Dose:

#### Drugs

Anesthesia:  Dose:  Analgesia:  Dose:  Other / Comments:


#### Acquisitions

##### PET/SPECT

Name	Description	Initial Horizontal Position	Initial Vertical Position
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##### CT

Name	Description	Initial Horizontal Position	Initial Vertical Position
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# Albira - Reconstructor

**Albira Reconstructor**

**Study Selection**

Studies Pending

Name	Date	Subject
Estudio Nuevo 400	04/09/2008 17:26:02	Ra2
Estudio Nuevo 398	04/09/2008 17:06:17	Ra2
Estudio Nuevo 395	04/09/2008 16:31:40	Ra2
Estudio Nuevo 392	04/09/2008 12:36:17	Ra2
Estudio Nuevo 390	04/09/2008 11:43:59	Ra2
Rata con MAA	20/08/2008 9:58:08	Test
Estudio Nuevo 353	19/08/2008 13:21:49	Test
Estudio Nuevo 352	19/08/2008 13:16:54	Test
Estudio Nuevo 351	19/08/2008 13:08:29	Test

Selected

Buttons: Add >, Add All >>, < Remove, << Remove All

Buttons: Advanced Reconstruction, Start Reconstruction

**Progress Details**

Reconstruction started  
Done

View in PMOD

Clear Log Save Log

Coronal Sagittal Transverse

**Overall Progress**

0 %

Elapsed Time 00:00:00 Remaining Time 00:00:00

Study (1 of 1)

Name Date 20/02/2008 0:00

Progress 0 %

Elapsed Time 00:00:00 Remaining Time 00:00:00

Acquisition (1 of 1)

Name FOV Standard

Type Mode SPECT

MLEM Progress 0 %

Elapsed Time 00:00:00 Remaining Time 00:00:00 Carestream

# Albira - Manager

The interface features a top navigation bar with the 'Albira Manager' logo on the left and a set of buttons for 'Drugs', 'Phenotypes', 'Compounds', 'Isotopes', and a red 'X' icon on the right. Below this is a secondary navigation bar with tabs for 'Experiments', 'Subjects and Studies', 'Protocols', 'Acquisitions', and 'Administration' (which is currently selected).

The main content area is divided into two sections:

- Users:** Contains a search bar and a table with columns for Name, Information, and Occupation. Below the table are buttons for 'Delete User', 'Edit User', and 'New User'.
- System:** Contains a 'Folder Layout' dropdown menu set to 'Date/Subject/Study', and buttons for 'Backup Data', 'Restore Data', and 'Manage Deleted Objects'. The 'Carestream' logo is located in the bottom right corner of this section.


Name	Information	Occupation
Dr. Luis Alberto Medina Velázquez		Investigador
Dra. Patricia García López	Lab. Farmacología	Investigadora
Juan Pablo Cruz Bastida	Tesis	Físico
M. en C. Enrique Pérez Cárdenas		Investigador en ciencias Médicas
Test	Test	

# Albira - Supervisor

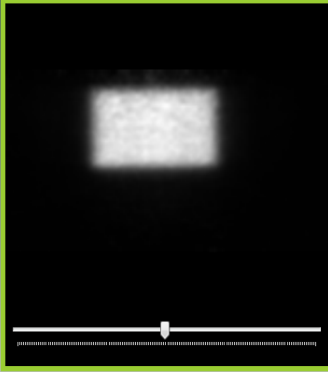
**Albira Supervisor** ✕

Summary **PET** SPECT CT Validation New Quality Control

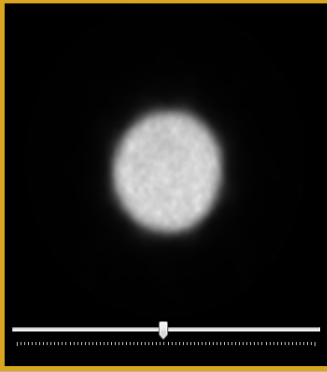
Options



Coronal



Sagittal



Transverse

100 %  
0 %

**Uniformity** Back to Summary

Current Quality Control

Quality Control Status

Next Quality Control

Test Name	Value(%)	Criteria(%)	Deviation(%)	Result
Integral 100%	6.6526144410387	< 10.00	0	PASSED
Integral 75%	6.18696737537144	< 10.00	0	PASSED
Differential 100%	4.08342207668393	< 10.00	0	PASSED
Differential 75%	3.22634950101757	< 10.00	0	PASSED

PET Summary **Pet Energy Validation** Decompression **Uniformity** **Carestream**

# Powerful Easy to Use Software Solutions

- Single-click multimodal acquisitions and rapid reconstructions
- Comprehensive suite of administrative tools to assign user privileges
- Designed for the researcher with your workflow in mind
- Optimized, proprietary, fully parallelized reconstruction algorithms
- Automated multi-modal image fusion of PET/CT or SPECT/CT images
- Image segmentation
- Powerful multi-parameter kinetic modeling including Monte Carlo methods
- Open architecture/DICOM compatible
- Dedicated computers/storage devices for acquisition, reconstruction, and data storage to drive throughput at every step of the imaging workflow



# Global Services

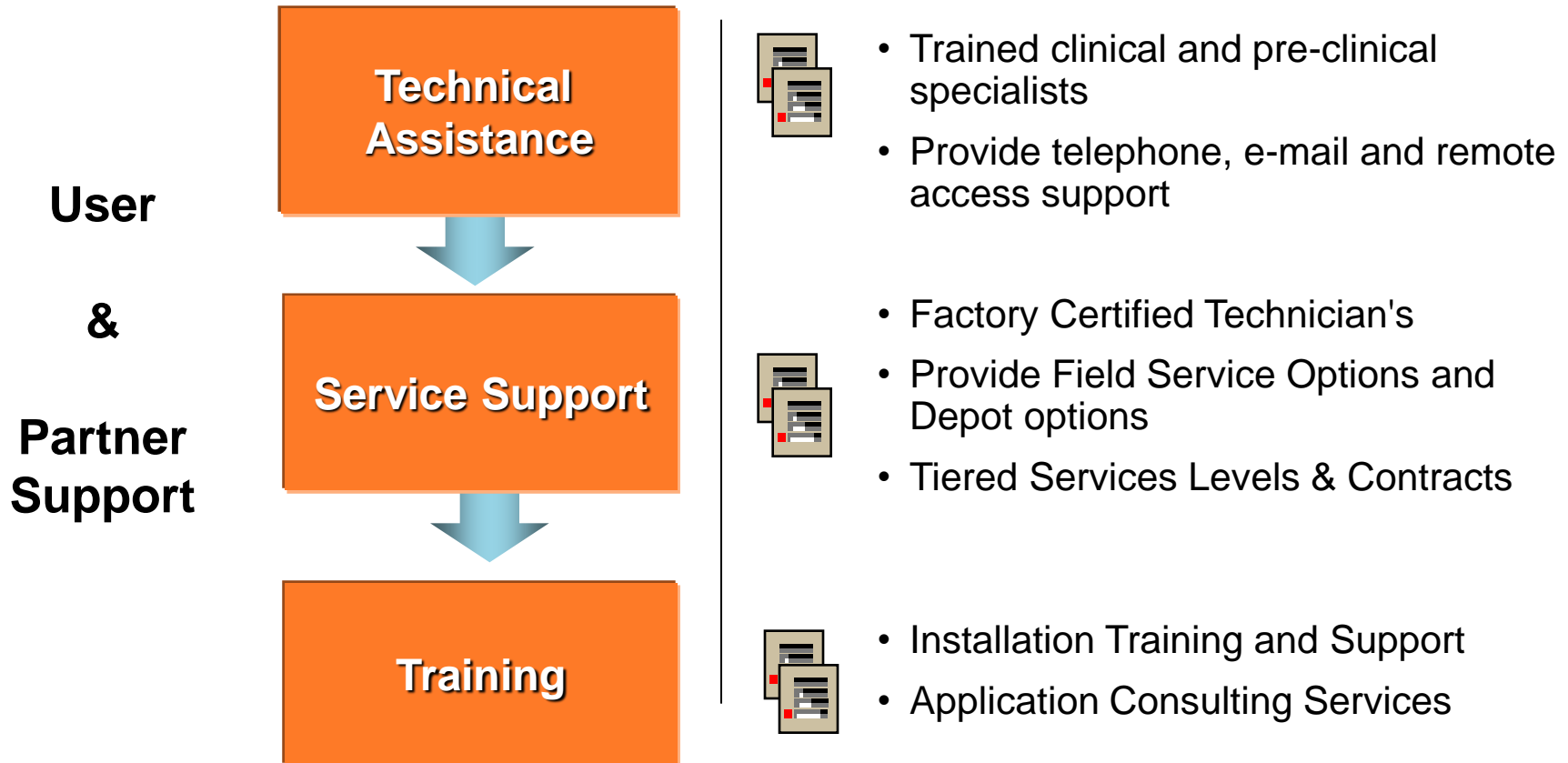
## Service and support

- Our global service team includes 1150 field engineers and 250 customer support agents
- Professional Services guide and support implementation of healthcare solutions and drive improvement in customer processes & workflow
- Service personnel are trained and located for timely maintenance and quick response to keep products and customers at peak performance



# Global Services Model

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# Levels of Service

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## *Premium Service Plan*

- Unlimited field service repairs (parts/labor)
- A Preventative maintenance visit including system calibration
- 48-72 business hour response
- Unlimited tech support including remote access support
- Free software maintenance updates

## *Basic Service Plan*

- One remedial visit (parts/labor included)
- A preventative maintenance visit
- 48-72 business hour response
- Unlimited tech support including remote access support
- Free software maintenance updates
- 10% off of billable parts and labor

## *Preventative Maintenance*

- A preventative maintenance visit including system calibration
- 10% off of billable parts and labor

Thank you!