



**Your time is valuable.  
Your reading workflow is unique.  
You want to perform your reads anywhere, any time.**

UniSyn™ – advanced, customizable PET/CT image fusion  
and nuclear medicine image processing.

# Thousands of imaging professionals around the world prefer UniSyn™ Image Fusion as their #1 choice to meet these critical needs.



## Work Anywhere!

UniSyn's thin client deployment model means you are no longer limited to geographically restricted legacy workstations.



## All the Tools You Need

Volume SUV measurement, MIP, automated prior study alignment and comparison, save/restore measurements.

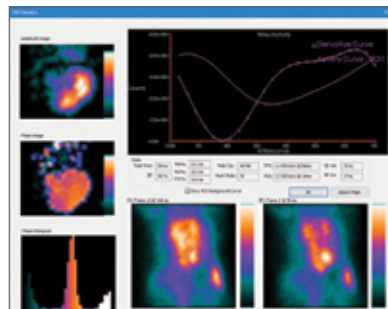
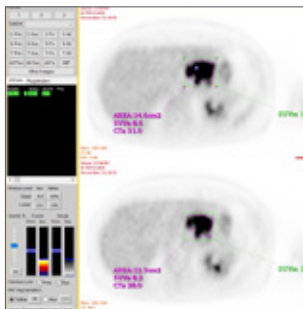


## Customize Almost Everything

Single study and comparison hanging protocols, mouse button behavior, keyboard shortcuts, crosshair types, color maps, initial SUV display window and many others. Profile storage on shared network drive or web means they follow you and are available wherever you want to work.

## Easily Review History and Collaborate with Referrers

Export single images, slice stacks, MIP movie loop, with customized series descriptions, to PACS or to other DICOM workstations.



## Advanced Features Where You Need Them

Threshold based lesion segmentation and volume determination, lesion tracking with our RECIST calculator, fuse CT to PET/CT.

## Nuclear Processing

Renal, gastric, gall bladder, MUGA, semi-automated pulmonary lobe determination.

## Essential Diagnostic Tools

### Multi-modality

- PET-CT, SPECT-CT, and PET-MR
- Fuse PET-CT to independently acquired MR or CT scans
- Maximum Intensity Projections (MIP)
- Rotate MIP with independent window/ level, pan and zoom control
- Triangulate in 2D viewport by click on MIP image
- All  $SUV_{max}$  displayed directly on MIP

### Flexible Study Comparison

- Compare up to 7 studies simultaneously
- Automated elastic and rigid study alignment
- Synchronized zoom/pan/stack and crosshair position
- Store ruler and SUV measurements and restore prior SUV VOIs and measurements from earlier to later studies
- Lesion tracking of SUV, volume, and diameter, including RECIST determination
- Left/right or top/bottom comparison options

### Collaborate and Export

- Export single images, series, as DICOM secondary capture, including MIP
- Summarize and distribute key image findings in multi-image series
- Copy images to desktop applications

### User Based Profile Customization

- Over 75 user specific keyboard shortcuts
- User specific mouse button functionality for MIP and MPR viewports
- Create custom single study and comparison viewport layouts using GUI based layout editor
- Custom color maps
- Color maps for standalone and fused views
- Crosshair type
- Starting fusion opacity
- Double click zoom full or half screen
- Auto triangulate to max pixel
- Follows you – store profile on shared network drive or web

### Workflow Efficiency

- Independent color maps for fused and non-fused images
- Toggle and compare AC and non-AC PET images
- Industry leading image load time
- Intuitive user interface

### Standardized Uptake Values (SUV)

- Calculate  $SUV_{max}$  in a volume and area
- Identify  $SUV_{max}$  pixel on 2D and MIP viewports
- List all  $SUV_{max}$  measurements with Master Lesion Index and triangulate all viewports to maximum voxel with a click
- Average lesion SUV
- Manual input SUV calculator; Weight, height, and other input corrections
- SUV BW, LBM and BSA
- Total lesion glycolysis

## Advanced Features

### Auto Segmentation

- Automatically determine areas, maximum diameter and volumes of lesions on PET images
- Segmentation threshold based on percentage of lesion maximum or absolute SUV
- Automatically determine maximum SUV bounding box

### AutoFuse

- Manual and automated 3D registration of CT to PET/CT, SPECT to SPECT/CT
- Save the registered data set or export the fused images back to your PACS

### Enhanced Lesion Tracking

- Store previous  $SUV_{max}$  and lesion diameters
- Track lesion volumes, max diameter and max/peak SUVs over time
- Graph lesion statistics or export data to spreadsheet
- Full RECIST determination, including support for lymph nodes



Convergent has taken the initiative to contact loyal clients for feedback and provide training on the latest features or revisions to accommodate workflow needs. This is a welcome service which is not typically found with other vendors where service seems to have taken a back seat to sales.”

*Tobias Schifter MD, FACR,  
East Valley Diagnostic Imaging, Phoenix, AZ*

# YOUR Workflow, YOUR Way.

Choose Convergent Imaging Solutions to Meet Your Image Fusion Needs.

## Nuclear Medicine Review

- Supports all NM formats: static gated, dynamic, SPECT, TOMO
- Viewing protocol support using image ID, series and study descriptions
- 2D uptake statistics, including right/left mirror uptake
- NM style window levelling; set window higher than image maximum
- Absolute or relative count window level linking
- Splash mode display
- NEMA color maps

## SPECT/CT

- Dual isotope SPECT/CT: toggle fusion from one SPECT to the other
- Register SPECT with SPECT and export modified SPECT.
- Register standalone SPECT to standalone CT.

## Nuclear Medicine Processing

### Renal/Gallbladder

- Automated background ROI generation
- Correction for movement
- Perfusion phase statistics
- Sum individual frames

### Gastric Emptying

- Automated ROI mirror to AP or PA and propagate to all time frames
- Edit individual time frames separately
- Elashoff fitting with decay correction

### MUGA

- Phase, amplitude, phase histograms
- Auto interpolate from ES and ED ROI
- Background correction
- Ejection fraction, PER, PFR determination

## Pulmonary lobe uptake determination

- Semi automated CT lung segmentation
- manual determination of lung fissures
- ROI interpolation
- ROI split mode
- Individual lobe uptake statistics

## Gated Cardiac

- Integration with Cedars-Sinai and Emory 4DM gated cardiac applications



I use UniSyn routinely to compare PET/CT scans with prior PET/CT, CT and MR scans. It is fast, well designed and robust...Convergent is always available for phone support and has been incredibly responsive in incorporating my feedback into their product"

*Borys Krynycky MD,  
Personal Care Molecular Imaging, Wall, NJ*



Convergent's image fusion is available on all my PACS stations, allowing me to read PET/CT images from wherever I am, even if it's from home to double check the work of a resident or technologist."

*Robert Lisbona MD,  
McGill University Health Center, Montreal QC*



Customize and optimize your molecular imaging reading workflow. **Convergent Imaging Solutions can show you how.**

For general inquiries, or to arrange an online demonstration of UniSyn, please call 613.212.0063, or email [sales@convergentimaging.com](mailto:sales@convergentimaging.com).