

## Description

Symbia.net is a clinical workplace that offers:

System Features:

- Workflow based architecture
- DICOM networking, printing
- User configurable displays
- 3D Orientation
- Image Fusion

Access to reading capabilities from anywhere (requires Server Management option)

- Any standard PC, Mac, or iPad with a network connection can be set up as a client
- Up to 10 concurrent users can access the clinical network simultaneously

Easy installation and operation

- Symbia.net easily integrates with existing cameras, RIS and PACS
- A virtually unlimited number of client computers can be installed remotely (requires Server Management option)
- Designed for the needs of nuclear medicine with a user friendly interface and advanced automation features

Optional Extensions

- Server Management option
  - Supports up to 10 concurrent users
  - 1 seat at the workplace
  - Up to 9 floating client licenses
- Cardiology Engines
- Oncology Engines
- Neurology Engines
- MI Processing Engine
- Advanced SPECT/CT Reconstruction
- MI Cardiac Process Engine

The Cardiology Engine provides the Cedars Cardiac SPECT Suite, a comprehensive set of quantitation programs for the evaluation of SPECT Myocardial Perfusion Imaging

The engine calculates a comprehensive set of cardiac parameters including ejection fractions, volumes, wall motion including right ventricular free wall motion in QBS, wall thickening, perfusion (%). QPS allows for the quantitation of prone SPECT data and of serial perfusion changes. Both 20 and AHA-17 segment scoring models are available. In addition to calculating an Eccentricity Index, QGS also calculates a more regional measure of LV shape known as the Shape Index. Displays include gated slices with contours, a motion frozen display which results in better resolution and contrast by eliminating motion of the cardiac cycle, interactive 3D images, and polar maps. Manual over-ride of contours and DICOM compatible output are additional features. Outputs include DICOM secondary capture files, result files as well as the ability to generate an AVI file format. The Cedars application is an OEM product developed and supported by Cedars Sinai.

Applications include: Cedars SPECT Suite

Part No. / Product	Description
	<p><b>Cardiac Processing (Autocardiac Activity) Features</b></p> <ul style="list-style-type: none"> <li>- Process up to 4 series simultaneously</li> <li>- Mixed Non-Gated, Gated, Profile series simultaneously Profile simultaneous AC and Non-AC Multi-Isotope support (6 per series)</li> <li>- Separate reconstruction parameters per series / isotope 3D Elliptical Masking</li> <li>- Filtered Backprojection, Iterative-W, OSEM 2D, or OSEM 3D (optional) Reconstructions</li> <li>- Coincidence Reconstruction</li> <li>- True 3D Reconstruction Zoom</li> <li>- Trial Mode Reconstruction</li> <li>- Interactive Filter Tool</li> <li>- Interactive Masking / Centering</li> </ul> <p><b>General Reconstruction (TOMO Reconstruction Activity)</b></p> <ul style="list-style-type: none"> <li>- Process up to 5 series simultaneously</li> <li>- Multi-Isotope support (6 per series)</li> <li>- Standard Tomography and Dynamic Tomography reconstructions</li> <li>- Separate reconstruction parameters per series / isotope</li> <li>- 3D Elliptical Masking</li> <li>- Filtered Backprojection, OSEM 2D or 3D (optional) Reconstructions</li> <li>- 3D Reconstruction Zoom</li> <li>- Trial Mode Reconstruction</li> <li>- Interactive Filter Tool Interactive Masking / Centering</li> <li>- Chang's Attenuation Correction</li> </ul> <p><b>Quality Control (Quality Control Activity) Features</b></p> <ul style="list-style-type: none"> <li>- Sinogram, Linogram, and Summed Image</li> <li>- Cine with reference line</li> <li>- Automatic and Manual Motion Correction</li> <li>- Static       X / Y / Copy / Paste</li> <li>- Dynamic     X / Y / Copy / Paste</li> <li>- Gated        Histogram Review</li> <li>- Tomo         X / Copy / Paste</li> <li>- Dynamic Tomo       Repeat X / Copy / Paste</li> <li>- Dynamic Tomo       X / Copy / Paste / Repeat Rejection</li> </ul> <p><b>Image Fusion</b></p> <ul style="list-style-type: none"> <li>- Automatic adjustment based on pixel size</li> <li>- Volume translation and rotation operations</li> <li>- Manual, interactive volume manipulations</li> <li>- Manually enter desired translation and rotation parameters</li> <li>- Adjustable alpha blending display</li> <li>- Selectable viewing angles</li> <li>- Choice of output matrix size (64, 128, or 256)</li> <li>- Landmark registration technique</li> </ul> <p><b><u>Organ Based Processing</u></b></p> <p><b>3D Reorientation</b></p> <ul style="list-style-type: none"> <li>- Free angle reorientation of reconstructed series</li> <li>- Process up to 4 series simultaneously</li> </ul>

Part No. / Product	Description
	<ul style="list-style-type: none"> <li>- Process 1 series to create 3 different series, each in a different plane</li> </ul> <p><b>Cardiac Planar Gated Blood Pool</b></p> <ul style="list-style-type: none"> <li>- Left and Right Ventricular EF Analysis</li> <li>- Regional EF Analysis</li> <li>- Automated Image Filtering</li> <li>- Automatic or Manual ROI determination</li> <li>- Functional Image Creation</li> <li>- Curve Analysis</li> <li>- Filling and Emptying Rate Analysis</li> </ul> <p><b>Shunt Analysis</b></p> <ul style="list-style-type: none"> <li>- Automatic Composite Creation</li> <li>- Curve Smoothing and Fitting Options</li> <li>- Integral Calculation for Patient and Shunt Curve</li> <li>- Shunt Qp/Qs via Area Method</li> <li>- Shunt Qp/Qs via Height Method</li> </ul> <p><b>Lung Analysis</b></p> <ul style="list-style-type: none"> <li>- Total or Segmented analysis</li> <li>- Perfusion Quantitation</li> <li>- L/R Lung Comparison</li> <li>- Geometric Mean Calculation</li> <li>- Single Lung Processing</li> </ul> <p><b>Thyroid Analysis</b></p> <ul style="list-style-type: none"> <li>- Automatic or Manual ROI determination</li> <li>- Uptake, Countrate, Area and Volume Calculations</li> <li>- Single Lobe Processing</li> <li>- 6 and 24 Hour Uptake</li> </ul> <p><b>Renal Analysis</b></p> <ul style="list-style-type: none"> <li>- Automatic or Manual ROI Determination</li> <li>- Gates GFR</li> <li>- Oberhausen ERPF</li> <li>- Itoh ERPF</li> <li>- Oriuchi MAG3</li> <li>- MAG3 without Blood Sample</li> <li>- Transplant</li> <li>- Captopril Comparison</li> <li>- Curve Analysis</li> <li>- R/L Ratio</li> <li>- Bubeck (TER) Processing</li> </ul> <p><b>Gastric Emptying Analysis</b></p> <ul style="list-style-type: none"> <li>- Automatic or Manual ROI Determination</li> <li>- Dual Isotope / energy window support</li> <li>- Geometric Mean Calculation</li> <li>- Curve Fitting Routines</li> <li>- Liquid / Solid Processing</li> <li>- Emptying Calculations</li> </ul>

Part No. / Product	Description
	<p><b>Hepatobiliary</b></p> <ul style="list-style-type: none"> <li>- Automatic or Manual ROI Determination</li> <li>- EF Calculations</li> <li>- Dynamic and Static Methods supported</li> <li>- User Defined Interval EF Processing</li> </ul> <p><b>Brain Analysis</b></p> <ul style="list-style-type: none"> <li>- ROI Quantitation and Ratio Analysis</li> <li>- Bloodflow Analysis</li> <li>- Patlok Plot &amp; Cerebral Bloodflow</li> <li>- Lassen Method</li> <li>- IMP</li> <li>- IMP-ARG</li> <li>- NIMS</li> </ul> <p><b>Image Manipulation</b></p> <ul style="list-style-type: none"> <li>- Series Filter</li> <li>- Series Arithmetic</li> <li>- Series Reformat</li> <li>- Series ROI &amp; Curve</li> </ul>
	<p>The Reconstruction Engine Advanced a three dimensional iterative reconstruction method with resolution recovery, scatter correction, and attenuation correction. It also includes statistics-based adaptive de-noising and de-blurring of planar images and longitudinal whole body bone scans. It can be used to shorten the acquisition time of planar images, bone scans or SPECT studies without loss in image quality. This reconstruction method can also improve overall image quality with better contrast, higher resolution, and decreased image noise when used to reconstruct full-time studies. This packages provides syngo MI Workflows with half-time acquisition parameters and optimized reconstruction settings and filters, specifically designed to acquire whole body SPECT scans in the time of a conventional whole body bone scans and to increase the scan speed of whole body bone scans to shorten scan time.</p> <p>Applications include: Flash3D, Scatter Correction, and CT Attenuation Correction for general and cardiac exams as well as Planar ½ Time Imaging.</p>
	<p>Additional features include:</p> <ul style="list-style-type: none"> <li>- 19" TFT panel</li> <li>- minimum of 170 degree horizontal and vertical viewing angle</li> <li>- Optimal picture resolution of 1280 x 1024</li> <li>- Contrast ratio 450:1</li> <li>- Maximum luminance 280 cd/m2</li> <li>- Anti-glare panel surface</li> </ul>