Xpress3.Cardiac

Xpress3.Cardiac™

A Turnkey Solution for Your Practice:
You Owe it to Your Patients...You Owe it to Your Equipment...and to Yourself!

SPECIFICATIONS*

UltraSPECT-proprietary WBR-based Image Reconstruction featuring:

- Iterative algorithm specifically tuned to cardiac data and based on an accurate modeling of the photon emission and detection phenomena, eliminating the collimator "blurr" effect
- Noise control applied simultaneously with resolution recovery
- Unique adaptivity to input data count statistics and noise level; the higher the noise in the input data, the higher the level of noise control applied
- Support for attenuation and scatter correction options

Supported Protocols:

- Same-day Tc-99m Rest/Stress
- Two-day Tc-99m Stress/Rest
- Same-day dual-isotope (Tl-201 and Tc-99m) Rest/Stress

Compatibility:

- DICOM conformant applications
- **Cameras:** Most gamma cameras from major manufacturers, including earlier models
- **Workstations:** Xeleris, Entegra, e.Soft, Pegasys, Odyssey, Mirage, Nuquest, SMV, Jetstream, and others
- **Clinical Packages:** QGS/QPS, ECToolBox, 4D-MSPECT

Specifications subject to change without notice.

[1]G. DePuey et.al., AHA 2009.
[2]G. DePuey et.al., JNC 2009.

UltraSPECT specializes in the development, production and sale of products dedicated to the enhancement of patient safety and comfort, imaging quality, and productivity performance of NM Gamma Cameras. UltraSPECT products are FDA cleared for distribution in the U.S. market and are already in routine use in hundreds of leading NM imaging centers in the U.S., Europe, Asia, and Australia.

UltraSPECT, Xpress3.Cardiac and WBR are registered trademarks of UltraSPECT.

UltraSPECT
101 Dillon Court
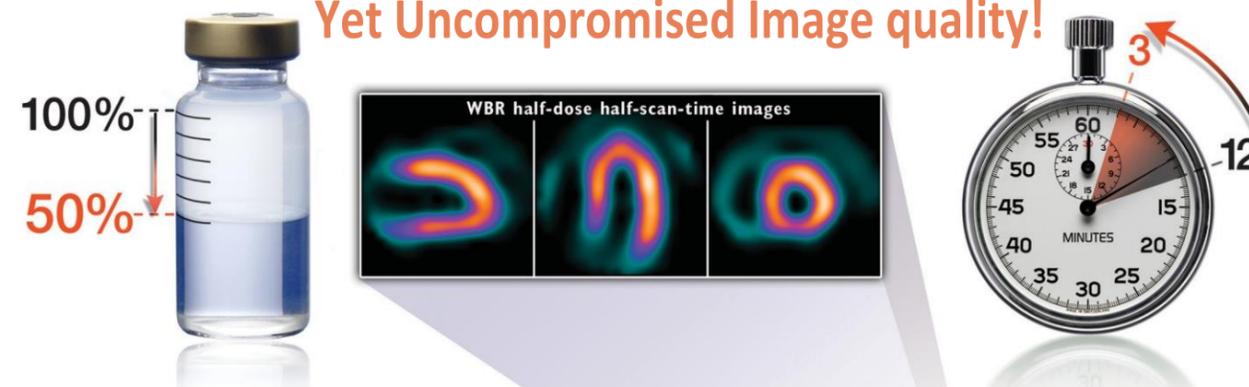Gray, TN 37615
Tel: 1-888-WBR-SCAN

E-mail: contact@ultraspect.com
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The Ultimate Clinical Versatility in Cardiac Imaging:
Low Injection Dose combined with Short Scan Time,
Yet Uncompromised Image quality!

100%
50%

WBR half-dose half-scan-time images

Nuclear cardiac imaging is facing increasing constraints on patient exposure to radiation and radioisotope availability, coupled with growing demands on patient comfort and imaging outcomes.

Today, the NM practice needs more than ever before the clinical versatility to accommodate each of these constraints and demands—separately or jointly.

Delivering ultimate versatility, UltraSPECT®'s Xpress3.Cardiac can be readily installed on your current gamma camera system with no need for major capital spending!

The Xpress3.Cardiac is based on UltraSPECT's unique proprietary Wide-Beam Reconstruction (WBR™) technology, the only iterative image reconstruction algorithm on the market implementing resolution recovery and noise control levels that are adaptive to the input data count density.

The Xpress3.Cardiac offers a total solution for the NM practice. The benefits are simply amazing!

- Significantly reduced injection doses, minimizing patient exposure to radiation
- Dramatically reduced scan times, delivering higher patient comfort and throughput
- Amazing simultaneous reduced-dose and short-scan-time imaging
- Dual-isotope imaging, featuring reduced-dose and shorter-scan-time acquisitions
- High image quality, yielding undiminished diagnostic certainty
- Compatibility with all commonly used cardiac clinical packages
- Attenuation and scatter correction options
- Ready integration onto your camera and workstation network

Ultra SPECT
Wide-Beam Molecular Imaging

Shaping the future of Nuclear Imaging

Xpress3.Cardiac

A Real Winner when it comes to Versatility In Nuclear Cardiac Imaging!

Why take 12 minutes when you can do it in less

Why take 12 min when you can do it in less…
Why inject full-dose when you can do with less…
And get Undiminished Image Quality and Diagnostic Certainty?

- Image resolution equivalent to that of a conventional full-dose full-time acquisition[1,2]
- Improved visualization of endocardial borders and wall motion segments[1]
- Undiminished diagnostic confidence[2].

Why take 12 min when you can do it in less…
And get Unmatched Patient Throughput and Department Productivity?

- Increased patient throughput, with productivity improved by over 50%
- Superior cost-effectiveness of your current NM equipment
- Simplified, automatic image processing for all patients—no need to set parameters or apply filters.

Why inject the full dose when you can do with less!

Why inject full-dose when you can do with less…
Why take 12 min when you can do it in less…
And get Significantly Improved Patient Safety and Tolerance?

- Minimized patient exposure to radiation
- Increased patient comfort, reducing motion artifacts.

### Seamless Product Integration and Automated Operation

- Readily connects to most major manufacturers' cameras and workstations
- Hardware (quad-core CPU with embedded software) installed within hours
- Automatic operation, transparent to the department work flow
- Reliable and robust, with virtually no "down" time.
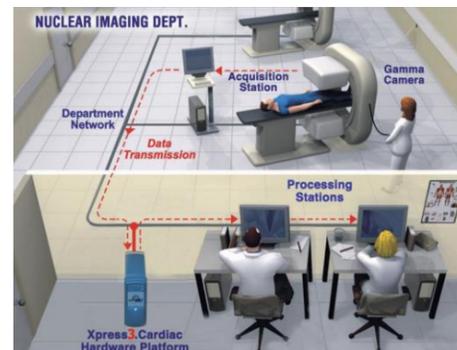
Xpress3.Cardiac Positions your practice to always be a step ahead in a constantly changing nuclear imaging environment.

Xpress3.Cardiac

Reduce the Dose… Reduce the Scan Time… Reduce Both Even… The Image Quality Remains Uncompromised!
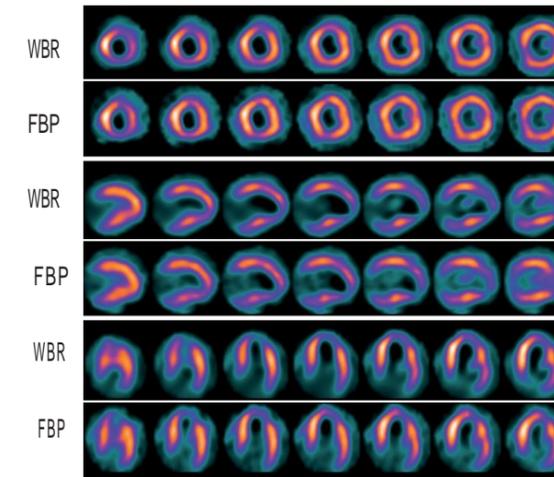

3-Minute Imaging:
Tc-99m Sestamibi (29.2 mCi) Stress Images

Dipyridamole pharmacological stress (resting heart rate: 71 bpm)

WBR images: 3-minute stress scan
FBP* images: 12-minute stress scan

75-year-old male (5'5", 160 lbs., 42" chest circumference), with coronary artery disease (CAD) risk factors: hypertension, diabetes mellitus and hypercholesterolemia. History: Angioplasty. Study shows a dilated left ventricle, prominent papillary muscle and stress perfusion defects: distal anterior (moderate) and inferoapical (marked).

*Filtered Back Projection.

*Courtesy of St. Luke's - Roosevelt Hospital, New York, NY.*
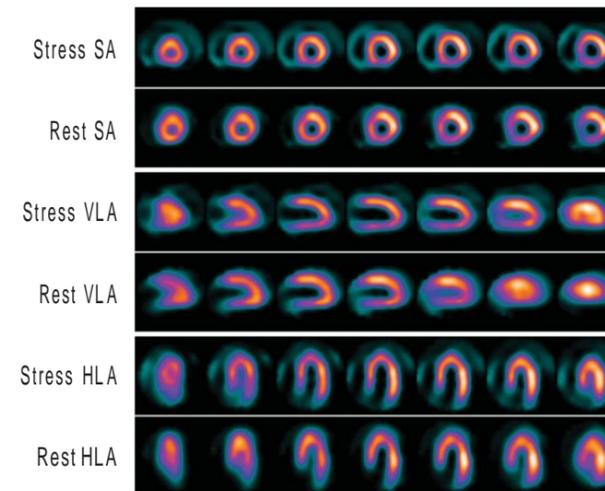
Half-Dose Half-Scan-Time Imaging:
Tc-99m Sestamibi (6.2 mCi) Rest and (21.1 mCi) Stress images

Rest study acquired at 15 sec. per frame, followed by Stress study acquired at 10 sec. per frame.

57-year-old male (5'11", 220 lbs.), referred for CAD screening. CAD risk factors: hypertension, hyperlipidemia. Gated SPECT ejection fraction 47% post-stress, with mild global hypokinesis.

Courtesy of Midwest Cardiology Associates, Overland Park, KS.
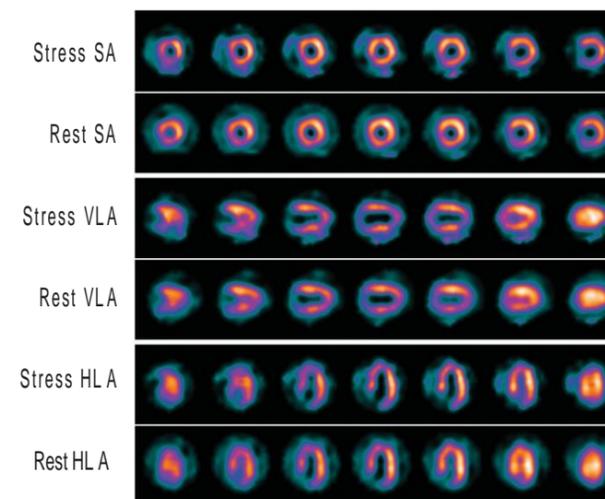
Dual-Isotope Reduced-Dose and Reduced-Scan-Time Imaging:
Tl-201 (2.0 mCi) Rest images
Tc-99m Sestamibi (20 mCi) Stress* images

Rest study acquired at 20 sec. per frame, followed by Stress study acquired at 10 sec. per frame.

82-year-old female (149 cm, 50 kg.), referred for CAD screening. Study is normal.

*Adenosine pharmaceutical stress

Courtesy of Mayo Clinic, Rochester, MN.