Exclusive WBR Technology:

Resolving the Age-old Trade-off between Sensitivity and Resolution in Nuclear Imaging

The Problem Inherent in Current NM Equipment:

- The collimator geometry required for higher image resolution results in lower clinical sensitivity
- Reduced sensitivity is compensated for by long acquisition times.

What Is WBR Technology?

- Proprietary, intelligent and innovative image reconstruction algorithms resolving the sensitivity/resolution trade-off
- Iterative image reconstruction based on an accurate modeling of the photon emission and detection.

What Does It Do?

- Simultaneously recovers image resolution and contrast
- Suppresses noise
- Eliminates the collimator's beam spread function effect
- Automatically compensates for the distance from the patient.

What Are the Advantages?

- Dramatically shortened acquisition time
- Significantly improved image quality.

Signal-to-Noise Ratio

- ² M.Bocher et. al., EANM 2005. ³Z. Bar-Sever et. al., SNM 2006.
- ⁴ S.J. Goldsmith et. al., EANM 2005. ⁵ Improved from 10.1 mm to 4.4 mm, as
- measured using standard NEMA SPECT resolution tests. ⁶J. Patton et. al., SNM 2003.
- ⁷R.E. Coleman et. al., EANM 2005 ⁸Z. Bar-Sever et. al., EANM 2005.

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.

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UltraSPECT

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

E-mail: contact@ultraspect.com Website: www.ultraspect.com

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Xpress Xact.Bone™

Every Clinical Protocol a Winner:
Half the scan time and Higher Image Quality...or
Twice the Resolution for the Standard Scan Time





Imagine performing a standard highresolution SPECT bone scan... and Imagine the images displayed at a superb image quality, never before seen in Nuclear Imaging! Or... Imagine completing a Whole-body acquisition in less than 8 minutes... with the images displayed at a higher

image quality than that you have learned to expect!

All this is now possible thanks to UltraSPECT®'s exclusive Wide-Beam Reconstruction (WBR™) technology! WBR virtually resolves the well-known trade-offs between sensitivity and resolution in Nuclear Imaging, revolutionizing the way Nuclear Imaging is practiced. The benefits are unimaginable!

- Dramatically reduced scan times
- Superior image quality
- Increased diagnostic certainty
- Unsurpassed patient throughput Higher department productivity
- Improved patient tolerance and cooperation
- Seamless product integration and automated operation.



Shaping the future of Nuclear Imaging

Xpress/Xact.Bone

Revolutionizing Your Nuclear Imaging Practice In More Ways than You Can Imagine!

Xpress.Bone™

Half the Scan Time...

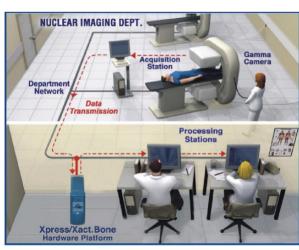
Yet Superior Image Quality with **Undiminished Diagnostic Certainty**

- Higher SNR¹ due to lower background noise²
- Higher lesion uptake intensity and better definition of foci³
- Enhanced contrast and lesion detectability,² leading to diagnostic confidence⁴
- Reduced motion and bladder artifacts
- No post-reconstruction filtering applied, eliminating "cosmetic" image enhancement.

Half the Scan Time...

For Unsurpassed Patient Throughput, **Department** Productivity **Patient Tolerance**

- Increased patient throughput, with productivity improved by over 50%
- Maximized cost-effectiveness of your current NM equipment
- No need to set parameters or apply filters
- Repeat scans virtually eliminated
- Improved patient comfort.



network

Readily connects to most major manufacturers' cameras and workstations

Seamless Product Integration

and Automated Operation

- Hardware (dual Pentium processor with embedded software) installed within
- Fully automatic operation, transparent to the department work-flow
- Single automatic processing protocol for
- Robust and reliable, with virtually no "down" time.

Xpress/Xact.Bone

Repositions your practice to meet today's growing demands on clinical efficacy, department productivity and patient comfort.

Xact.Bone™

Twice the Resolution⁵...

and Diagnostic Certainty

Higher image contrast

■ Enhanced lesion detection⁸

interpretation.⁷

Increased confidence in image

For Unmatched Image Quality

■ Highly improved SPECT resolution

■ Enhanced Whole-body/planar resolution

■ Higher uniformity of image resolution⁶

■ Clarity of uptake improved by over 30%⁷

Bone to soft tissue ratio increased by

Xpress/Xact.Bone

Nuclear Bone Imaging at its Best: Uncompromised Clinical Sensitivity and Specificity

Xact.Bone

