SPECTRUM
DYNAMICS MEDICAL

apr SALUD EN IMAGEN

D-SPECT Cardiac Digital SPECT Imaging

Nuclear cardiology in the 21st century

In the 21st century, most nuclear cameras are still relying on a technology invented in the 1950s (crystals and vacuum tubes). Spectrum Dynamics Medical revolutionized the industry in 2006 with the introduction of the first clinical Cadmium Zinc Telluride (CZT) based nuclear cardiac imaging system—the D-SPECT®—and now the next generation **D-SPECT CARDIO and D-SPECT VISTA.**

Fast results: The D-SPECT can acquire a complete gated SPECT study in as little as two minutes, improving clinical workflow, enhancing patient compliance and reducing the chance of patient motion.

Image quality: D-SPECT's count rich data sets combined with a proprietary reconstruction algorithm ensure optimal spatial resolution and exceptional image quality.

TruCorr: For high quality SPECT, attenuation correction is essential. Spectrum Dynamics has developed a new methodology for attenuation correction for its D-SPECT Series camera. TruCorr uses Deep Learning to generate attenuation corrected myocardial perfusion images.

Dose reduction: The extremely high sensitivity of the D-SPECT detectors allows for dramatic reductions in injected dose. Patients and staff benefit from the lower radiation dose.

Simultaneous multi-isotope imaging (SDI): The exceptional energy resolution of CZT allows the detectors to acquire multiple energies at the same time with minimal down scatter. This makes simultaneous stress and rest imaging possible with perfect imaging registration, as well as new advanced multi-isotope protocols such as 123I-mIBG or 20-1TI and 99mTc Sestamibi or Myoview.

Patient compliance: The open gantry design and the ability of the CZT columns to "swivel" back and forth allow the nine detectors, in an L-shaped array, to acquire data from the patient's Left Posterior Oblique (LPO) to Right Anterior Oblique (RAO) without the need to rotate the detectors around the patient. This eliminates the chance of an acquisition collision, pinch points or claustrophobia that moving detectors can cause.