Nuclear Medicine Suite

GATED HEART ANALYSIS (FUGA™)

Study courtesy of University of Munich (LMU), Germany.

- Automatic edge detection
- Amplitude and phase images
- Left & right ventricular analysis
- Movie display

Contact us: info@hermesmedical.com
Explore more at: www.hermesmedical.com
The FUGA (FUncational Gated Analysis) program is used to analyze data from planar gated blood pool studies of the heart.

**HERMES FUGA™** uses cycle-dependent background correction to correct the counts within the end diastolic region for non-ventricular counts. The counts within the end diastolic region, corrected for cycle-dependent background, are used for the calculation of ejection fraction, regional ejection fraction (6), filling and emptying rates (5) and the final volume curve. This method has been shown (1) to minimize inter-operator variability when generating time-activity curves and is therefore ideally suited for calculating ventricular function parameters. The left ventricular edge detection is performed automatically using a variation on a second derivative method developed at Yale University (1).

**Summary of features**

- Automatic edge detection using filtered data and amplitude/phase images, manually adjustable
- Automatic but adjustable background region
- Calculation of several global and regional parameters
- Movie of phase image and phase histogram, wall motion and volume-flow curve

**Quantitative Results**

- Global ejection fraction of right or left ventricle
- Regional ejection fraction in relative or absolute mode
- Regional wall motion
- Peak filling/emptying rate
- Time to peak filling/emptying rate
- Filling fraction

**References**

4. Poliner LR; Farber SH; Glaeser DH; Nylaan L; Verani MS; Roberts R. Alteration of diastolic filling rate during exercise radionuclide angiography: a highly sensitive technique for detection of coronary artery disease. Circulation1984;70(6):942-50