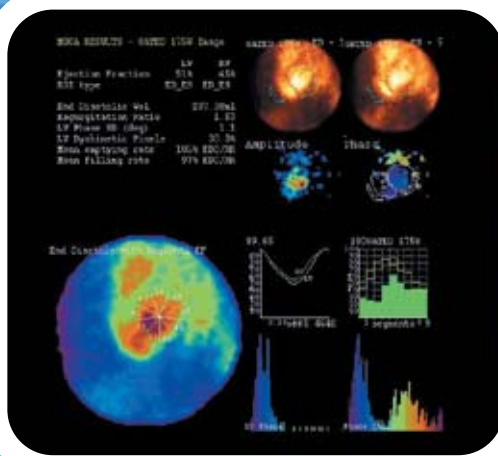


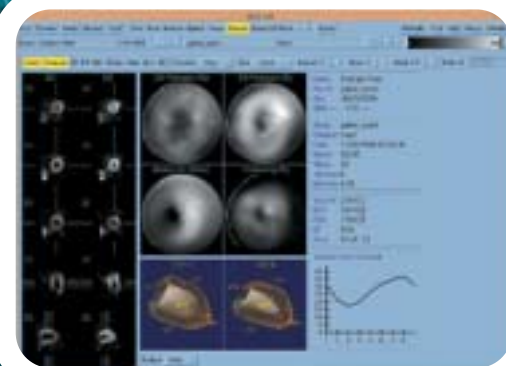
Nuclear Medicine Processing

Link Medical provides a complete solution for nuclear medicine processing

A range of validated processing protocols is available and these can be readily customised to the requirements of an individual customer. Where a unique solution is required, new protocols can be developed easily either by Link Medical or 'in-house'.



Sample (MUGA) report page



Sample QGS Processing screen

Image processing

mirage-process includes, as standard, all the functionality required in a full-featured processing system, including:

General

- Automatic motion correction
- Filter creation

Whole body

- Whole-body spot zooms

Cardiac

- Cardiac alignment
- Cardiac curve analysis
- Bullseye production
- Radial LV analysis

List mode

- List mode image/curve reconstruction

SPECT

- Reconstruction (by filtered back projection)
- Filter creation
- Image fusion (including multimodality support) by marker and manual alignment

Processing options

A number of processing packages are optionally available, these include:

- Cedars – Sinai QGS, QPS and QBS (BPGS) packages for Cardiac SPECT and gated SPECT analysis (**mirage-cardiac**)
- OSEM iterative reconstruction

Standard protocols

In addition to this basic underlying functionality, standard processing protocols are available. These include:

- First pass cardiac
- MUGA
- Myocardial SPECT
- Limb blood-flow
- Meckels diverticulum
- HIDA liver
- Oesophageal transit
- Curve/slope renal analysis
- Renal processing techniques
 - Rutland
 - Oberhausen
 - Bubek and Russel
- Renal output efficiency
- Renal transplant
- Micturition renograms
- Thyroid
- Parathyroid
- Wholebody bone
- Quantitative bone
- Lung ventilation and perfusion processing

Protocol behaviour

Protocols run within the display window and all user interaction occurs within this window. There should be no need for the user to process images in stages although this is possible should it be required. Protocols may also be run from the command line.

Protocol customisation

It is one of the features of Nuclear Medicine that different centres may have different methods of processing. We recognise this and our standard protocols have been written to provide most, attested, processing options so as to limit the customer as little as possible in the range of processing options available to them.

At Link Medical we understand that customers may desire to develop their own protocols to meet specific research requirements and to permit the use of processing protocols that have been established in-house. To facilitate such development, the complete set of underlying programs and 'C' libraries is available to the user, together with on-line manual pages and instructions for 'C' program and C-shell script development.



Sample processing window – mid processing