

Status of ATC PET QA Capability for Advanced Technology Protocols

June 22, 2006

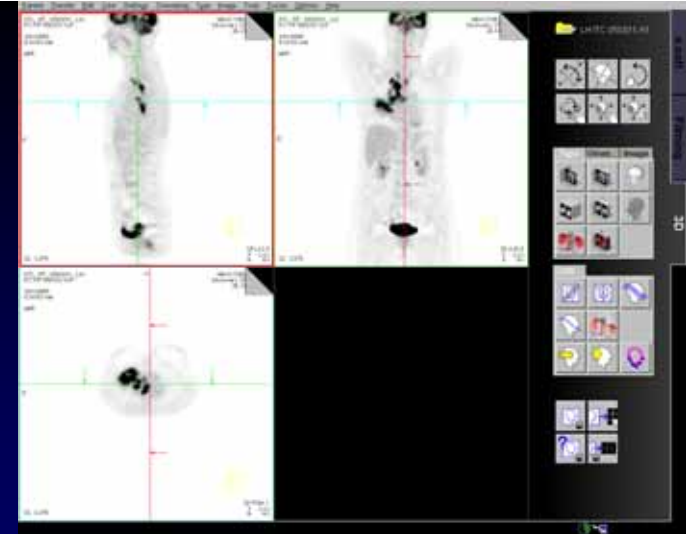
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RTOG 0515 Credentialing / QA

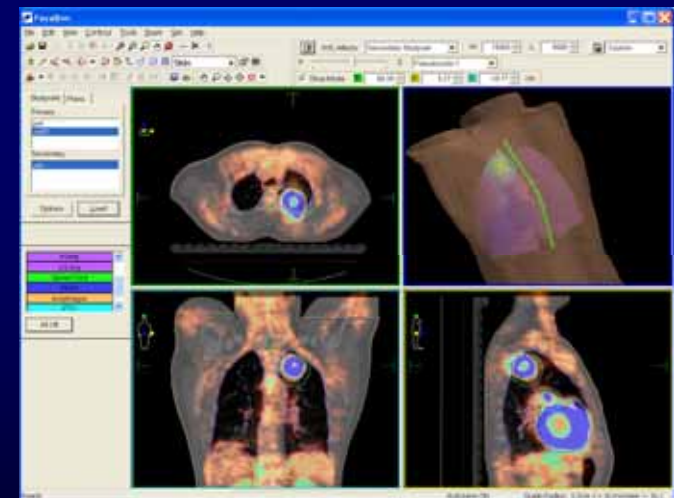
- Credentialing Requirements (see ATC web site)
 - Be credentialed for RTOG S-0132/ACRIN 6665 or RTOG 0235/ACRIN 6668
 - Demonstrate ability to submit 3DCRT Digital Data to the ITC
 - Credentialed for another ATC supported 3DCRT study
 - Submit FQ with digital data (CT, Structs, Plan, Dose)
 - Demonstrate digital submission of PET or PET/CT images to ITC
- Collect Data for Developing QA Procedures
 - Screen captures of fused PET/CT images in T/S/C planes

PET Image Review for RTOG 0515

1. Institution submits PET DICOM Images and TP data to ITC using FTP or media.
2. ITC places (anonymized) PET data on ATC secure web server for download by Nuc Med radiologist
3. PET studies read (qualitatively) using eFilm or Syngo (Siegel)
4. PET/CT image registration checked at ITC using FOCAL (Bosch, Forster)
5. TV contours evaluated using FOCAL with/without PET (Bradley)



PET scan (GE) downloaded and displayed on MIR NM Siemens Syngo software



PET and CT images registered on FOCAL workstation; displayed with TV/OAR contours

RTOG 0522

- Quantitative PET (PET/CT) images submitted to ACRIN, forwarded to NCI Archive
- CT, Structures, Doses, Plans submitted to ITC (DICOM or RTOG Data Exchange), forwarded to NCI Archive (DICOM)
 - ITC has forwarded one DICOM dataset to NCI Archive for testing. (Remaining five cases are in RTOG format.)
 - RTOG-to-DICOM conversion will be needed for data sets submitted in RTOG Data Exchange format.
 - Current transfer of data to NCI Archive is via SFTP.
 - ITC plans to use specially-configured MIRC Field Center software for future transfers of DICOM (RT) data to NCIA.