Status of ATC PET Support for Advanced Technology Protocols

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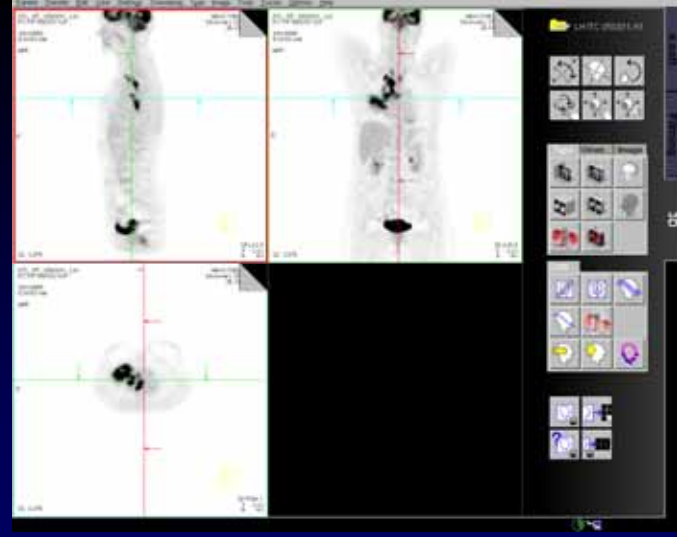
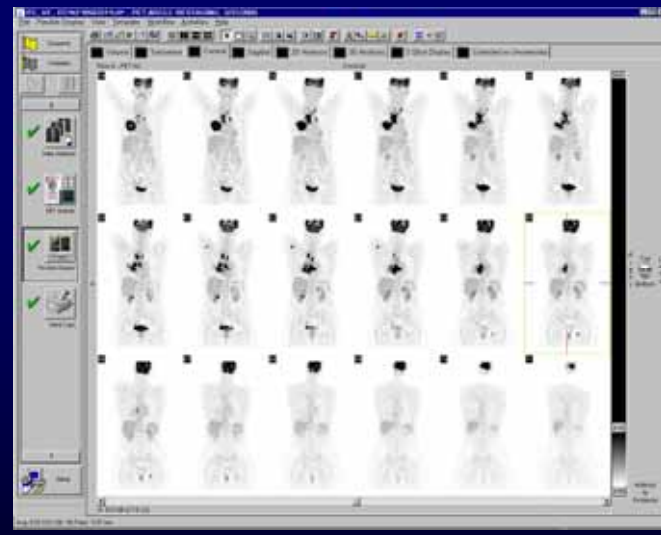
PET Image Review for RTOG 0515

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 MIR Nuc Med (LaForest)
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 scan (GE) downloaded and displayed on MIR NM eFilm software

RTOG 0515 Outstanding Issues

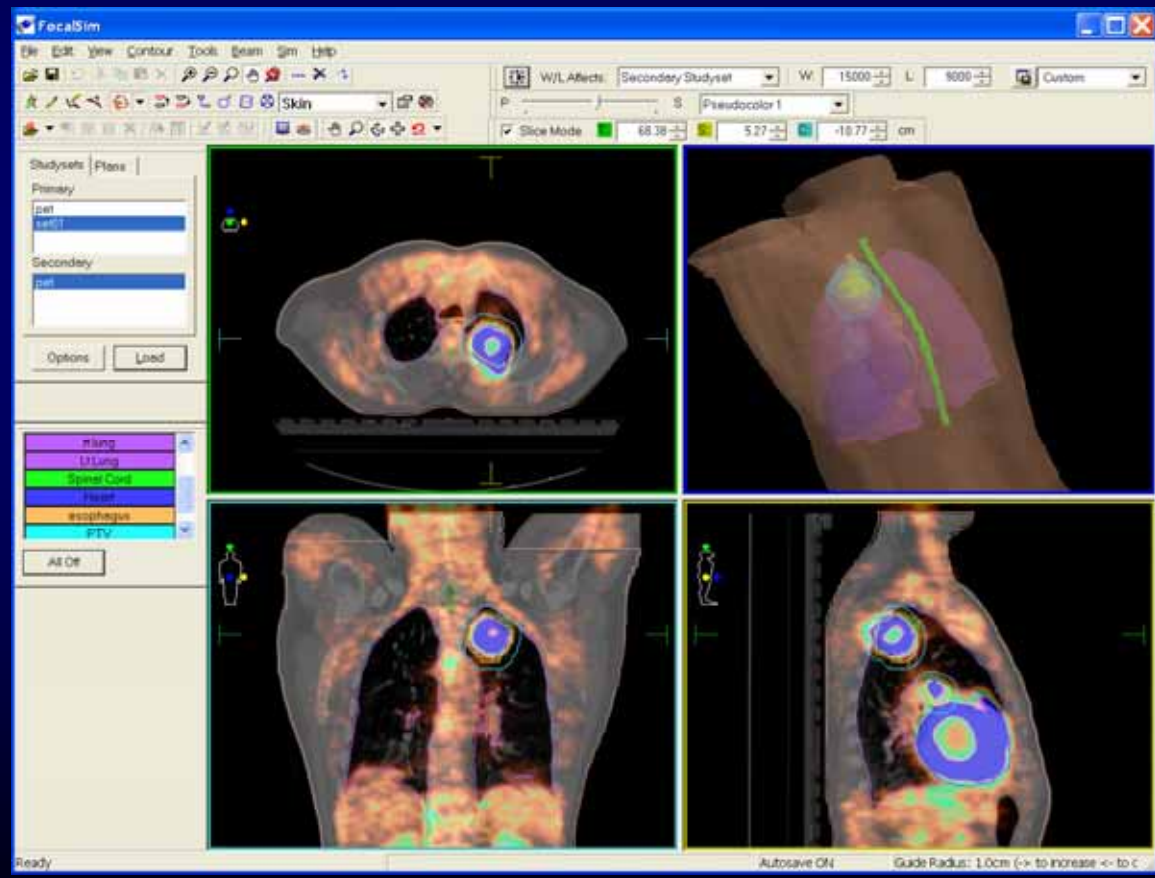
- PET/CT registration QA using FOCAL screen captures
- Data submission forms
- ATC Web page review

PET/CT Registration QA for RTOG 0515

- Institutions to submit screen captures of PET/CT images showing registration
  - T/S/C planes through tumor
  - T/S/C planes including spine (S) and liver (T/C)
- Images to be captured with window/level and blending set to make features visible in both CT and PET.
- Six images to be sent to ITC in JPG format.

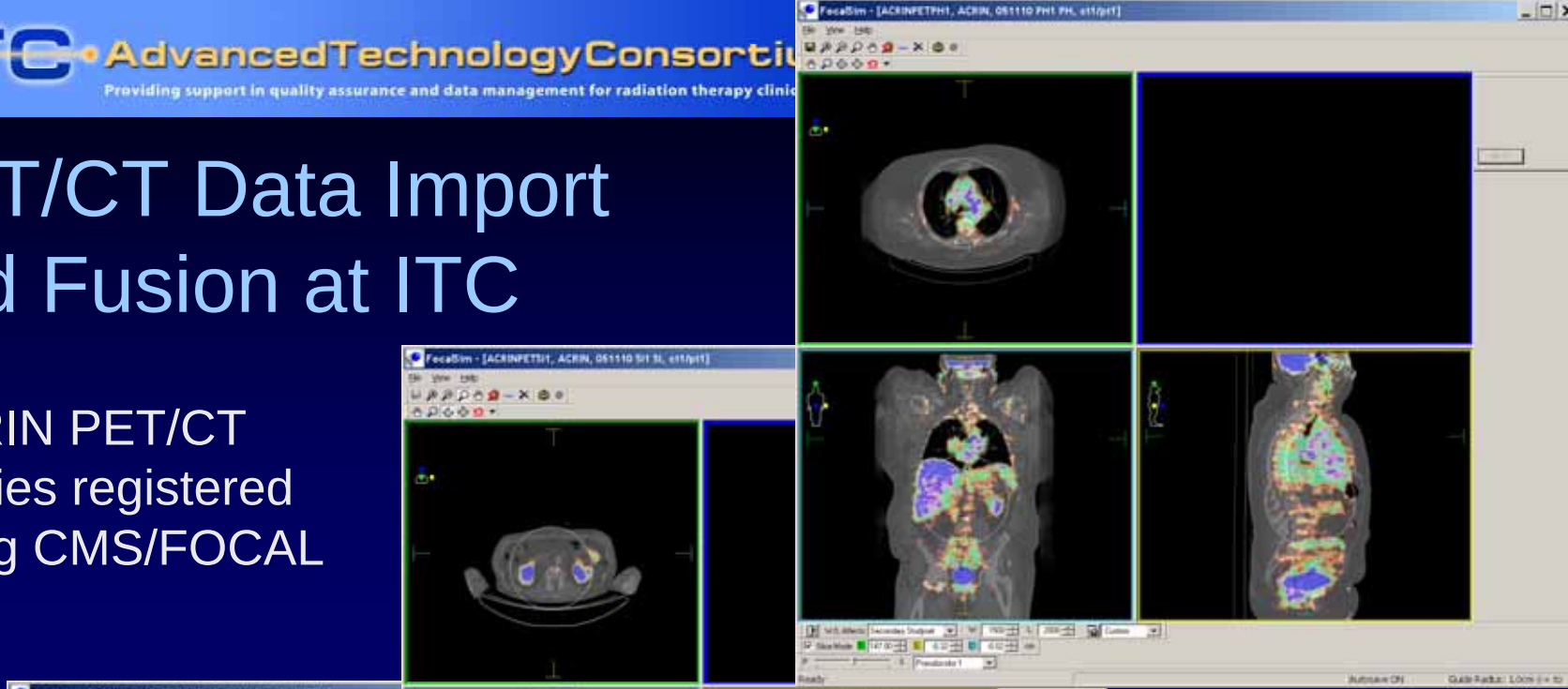
PET/CT Fusion for RTOG 0522 (Quantitative PET)

1. PET data submitted to ACRIN Core Lab
2. ACRIN checks PET images and forwards image data (and SUV scale factors) to ITC
3. ITC receives CT images, RT Structure sets, 3D Dose (DICOM, RTOG formats)
4. PET images registered with CT images, structures, dose reviewed at ITC.

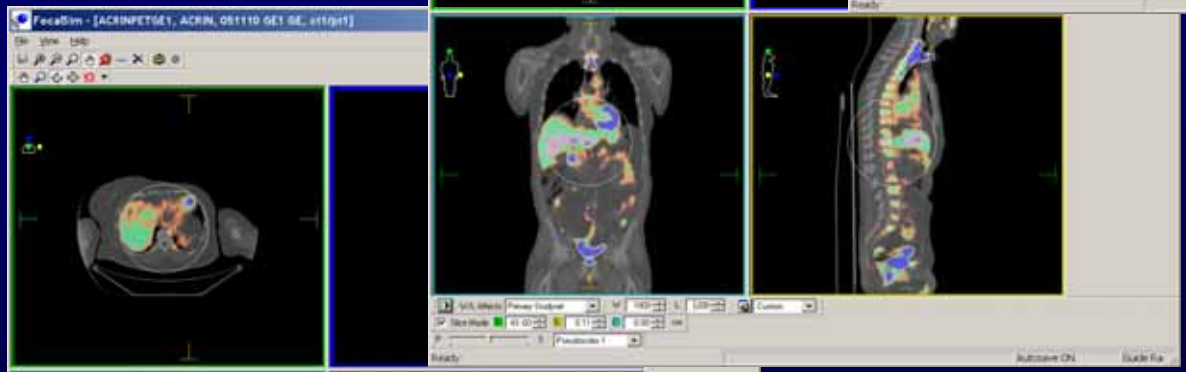


PET/CT Data Import and Fusion at ITC

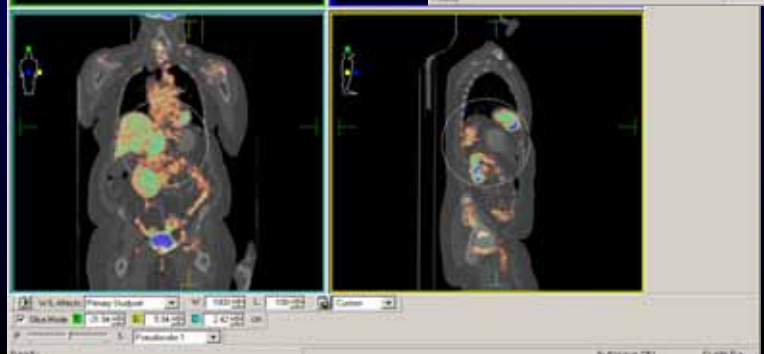
ACRIN PET/CT studies registered using CMS/FOCAL



Philips



Siemens



GE

RTOG 0522 Outstanding Issues

- Transfer of SUV scaling information from ACRIN to ITC
- ATC Web page review