ATC PRIORITY LIST

June 22, 2006

Service Priorities

- 1. Provide daily operational support to institutions participating in cooperative group protocols (RTOG, NSABP, JCOG) utilizing advanced technology and requiring digital data submission using ATC Method 1. See ATC website for protocol details. This service effort includes the following: (a) evaluate, approve, and notification regarding institution's credentialing tests for each specific protocol; (b) facilitate and perform QA reviews of submitted data including integrity of digital data submissions; target volumes, organs at risk, and dose distribution protocol compliance; and (c) maintain QA and treatment planning databases.
- 2. Provide operational support for the use of ATC Method 1 technology at QARC and increase use of this technology by other cooperative groups, i.e., COG, SWOG, and CALGB.
- 3. Provide expertise in the areas of protocol design, credentialing, monitoring, and analysis for new clinical trials that utilize advanced technologies and require digital data submission (e.g., NSABP B-39/RTOG 0413). The effort includes the following: (a) develop credentialing tests and criteria (including periodic review/modification of existing requirements/criteria); (b) design/manufacture phantoms for credentialing; (c) develop QA procedures, documents, criteria, and ATC web page/links; develop new protocol module for TPV and QA databases
- 4. Facilitate outcome analysis and data mining for ATC supported closed protocols.
- 5. Provide support to NCIC in their use of ATC Method 3 technology for MA.20 protocol.
- 6. Foster implementation of ATC compliant DICOM export capability. This includes the following: (a) working with radiation treatment planning systems (TPS) vendors; specifically, ATC will target TPSs manufactured by BrainLab, Radionics, Elekta Gamma Knife, TomoTherapy Hi-ART, Cyber-Knife systems, and Prowess; (b) ATC representation in NEMA/DICOM Working Group 7; and (c) ATC representation in the IHE initiative.

Developmental Priorities

- 1. Increase number of publications referencing ATC NIH U24 grants CA 86147.
- 2. Develop/implement QA process for protocols requiring multi-modality imaging (PET, MRI, Image fusion).
- 3. Further develop ATC Method 1 to include (a) review of transverse and coronal slices (isodoses and volumes); (b) review of verification images, i.e. Electronic View Box.
- 4. Work with RTOG to move protocol QA database and scoring to RTOG HQ.
- 5. Develop/implement brachytherapy QA software to facilitate RPC support of clinical trials. (See current time line for this work).
- 6. Develop, test, and implement ATC Method 2b technology at NCIC. (See current time line for this work).
- 7. Develop, test, and implement ATC Method 2a technology at ITC. (See current time line for this work).