Principal Investigator's Report Advanced Technology QA Consortium

RTOG Meeting – Miami, Florida January 19, 2006

James A. Purdy, Ph.D.
Department of Radiation Oncology
UC Davis Medical Center
Sacramento, CA, USA

Supported by NIH U24 grant CA81647, "Advanced Technology QA Center"

P.I.'s Report

- Welcome
- Approval of minutes from Jan. 4, 2006 Teleconference
- Review of Action Items
- Update on potential interactions with other cooperative groups
- ATC Website Review
- Treatment Planning Database Studies
- Plans for participation in 2006 Scientific Meetings
- Schedule of ATC conference calls and next meetings

Review of Action Items

- Issue of does ATC software meet requirements of CFR 21, Part 11 pertaining to electronic records and electronic signatures.
 - To be reported on at 3:00 PM: ITC Status Report

Changes at ITC - WU

- ITC/WUCON Network Re-configuration
 - To be reported on at 3:00 PM: ITC Status Report
- Change in research administration position
 - Lois Smith's position eliminated
 - ATC help will be provided by Kathy Feurer

Washington University School of Medicine

Department of Radiation Oncology

(Cancer Biology, Clinical and Physics Divisions)

Research Administrator

4511 Forest Park

St. Louis, MO 63108

URL: Feurer@radonc.wustl.edu

Phone: (314) 362-9773; FAX: (314) 362-9790

Review of Action Items

- The Treatment Planning Verification (TPV) database at the ITC and the RTOG Outcomes database in Philadelphia:
 - Sue Tucker R01
 - Joe Deasy R01
 - CMS in St. Louis has requested use of the TPV database; details are still being worked out, but both RTOG and ITC have indicated they are in support of this request.

Guidelines for Requests for ATC Data by Investigators

- 1. All requests must be submitted on the "Request for use of ATC Data" form.
- 2. Data that has not been previously published in a peer-reviewed publication may be released but must be approved by the group chair, the ATC P.I., and the appropriate ATC sub-contract P.I.
- 3. A copy of the research plan for the analysis must be received and reviewed by the Group chair or his/her designate and the ATC P.I. and ATC subcontractor P.I. before data are released. The research plan must include: names of investigators; objectives; background; type of data requested; and analysis plan. Approval by all three P.I.'s is required.

Guidelines for Requests for ATC Data by Investigators

- 4. Recognition of the cooperative group and the appropriate ATC member on the authorship line and in the acknowledgements of any subsequent publication is required.
- 5. A stipend for preparing the data may be requested by the Cooperative Group and the ATC depending upon the source of the request.

Request for Use of ATC Data Form

To:	Cooperative Group Chair and ATC, Princip	al Investigator
550	cooperative group count and in c, 1111114	ar mucanema.
	n:	
Date:		1
Protocol	Study #(s):	
research pl	s must be accompanied by a research plan for the proposed an must include: names of investigators; objectives; backgr and data an alysis description.	
Specify w	nat data is being requested:	
Specify w	aat data is being requested:	
Specify w	at data is being requested:	
Specify w	at data is being requested:	
Specify w	at data is being requested:	
Specify w	nat data is being requested:	
Specify w	nat data is being requested:	
Specify w	aat data is being requested:	
Specify w	aat data is being requested:	
		Date
Соорега		10000

Review of Action Items

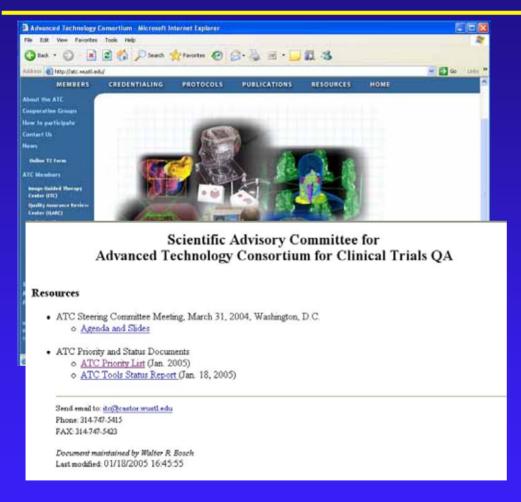
- Drs. Bosch and Anthony Levering (ACRIN) to investigate what effort it would take to download the PET data (gray scale only with normalization) from RTOG 0522 Protocol to ITC.
 - To be reported on at 1:35 PM: Status of ATC PET support for advanced technology protocols

Update on Potential Interactions with other Cooperative Groups

- EORTC (Bernard Davis, M.D., Univ. Hospital of Zurich contact person)
 - Interest again expressed at ASTRO
 - Potential protocol identified
 - No real progress made
- NABTT (Dr. John Fiveash, M.D., Department of Radiation Oncology, University of Alabama-Birmingham)
 - will use modified ATC Method 1
 - Spoke with Dr. Fiveash last week
- JCOG: Requested 2nd protocol support
- TROG



ATC WEB SITE (http://atc.wustl.edu)



- Priority Lists
- Timeline for ATC
 Method 1 at QARC
- Timeline for ATC
 Method 2 at ITC (at
 NCIC)
- Publication Page
- Assignments for developmental pages

P.I.'s Report

- Strategic planning for ATC Grant Renewal (1.5 years remaining)
 - —To be reported on at 3:20 PM: Strategic planning for ATC Grant Renewal

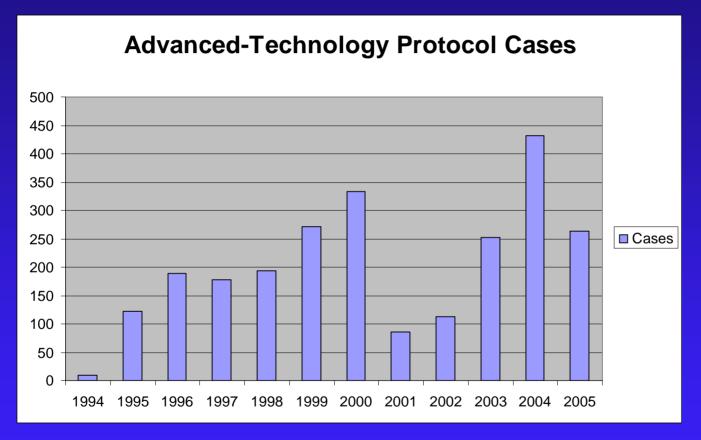
2006 Scientific Meetings

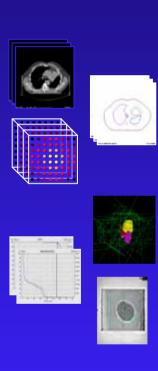
- AAMD Annual Meeting to be held June 4-8, 2006, in Vancouver, BC, Canada.
 - Workshop for digital data submission?
- AAPM Annual Meeting to be held July 30-Aug. 3, 2006, in Orlando, Florida.
 - ATC Brochure yes
 - ATC Booth?
 - Encourage RCET, RPC, ITC, QARC, and RTOG individual abstracts.
- ASTRO Annual Meeting to be held Nov. 5-9, 2006, in Philadelphia, PA.
 - ATC Brochure yes
 - ATC Refresher Course?
 - Encourage RCET, RPC, ITC, QARC, and RTOG individual abstracts.

Future ATC Teleconferences and Meetings

- Next ATC Teleconference is scheduled for March 1, 2006.
- Next ATC Meeting at COG/PBTC Semi-Annual meeting March 24, 2006 (Chicago)
- Next ATC Steering Committee Meeting tentatively scheduled for April 3-4, 2006

 June 23 2005 ATC Mtg: <u>2441</u> Complete Digital Data Sets Submitted Over 11 Year Period using ATC Method 1*



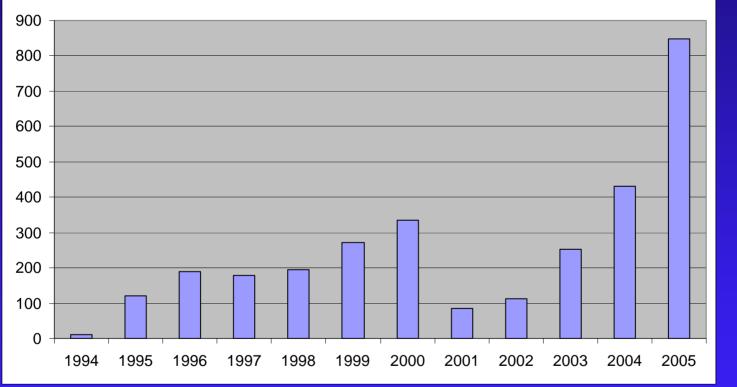


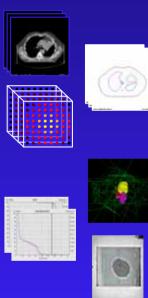
- 15 commercial RTP systems have implemented export capability (see http://atc.wustl.edu)
- 215 institutions able to submit digital data

ATE • AdvancedTechnologyConsortium Providing support in quality assurance and data management for radiation therapy clinical trials

Jan 19 2006 ATC Mtg: 3026 Complete Digital Data Sets Submitted Over 12 Year Period using ATC Method 1*

Annual Advanced-Technology RTOG Protocol Cases





- 16 commercial RTP systems have implemented export capability
- 331 institutions able to submit data



RTOG Digital Data Protocols (Jan 6, 2006)

Protocol	Description	Institutions Credentialed	Cases Accrued
	<u> </u>		
9406	Ph I/II 3DCRT Prostate Dose Escalation	54	1084
9311	Ph I/II 3DCRT Lung Dose Escalation	27	180
9803	Ph I/II 3DCRT GBM Dose Escalation	46	210
0022	Ph I/II 3DCRT/IMRT Oropharynx	35	69
0319	Ph I/II 3DCRT Partial Breast	31	58
0117	Ph I/II 3DCRT/chemo Lung	46	35
0126	Ph III 3DCRT/IMRT Prostate	125 (54 IMRT)	767 (148 IMRT)
0225	Ph I/II 3DCRT/IMRT Nasopharynx	36	68
0232	Ph III Ext Beam/TIPPB Prostate	63	170
0236	Ph II SBRT Lung	7	29
0321	Ph I/II HDR/Ext Beam Prostate	14	66
0413	Phase III Partial Breast Irradiation	230(192/118/23	633(225/65/26)

Challenges: ATC Supported Clinical Trials

- Workload at ITC
- ATC compliant stereotactic radiosurgery or radiotherapy RTP systems
- PET (quantitative) data import and image fusion QA
- 4-D CT (several 100 MB)
- Image-Guided RT (EPID, Kilovoltage Cone beam CT, Helical Tomotherapy megavoltage CT)
- Adaptive Radiotherapy (Daily Confirmation and Adjustment using On-Board Imaging)
- Increased use of ATC Method 1 at QARC
- Successful implementation of ATC Method 2a at ITC and 2b at NCIC
- caBIG compliant software