

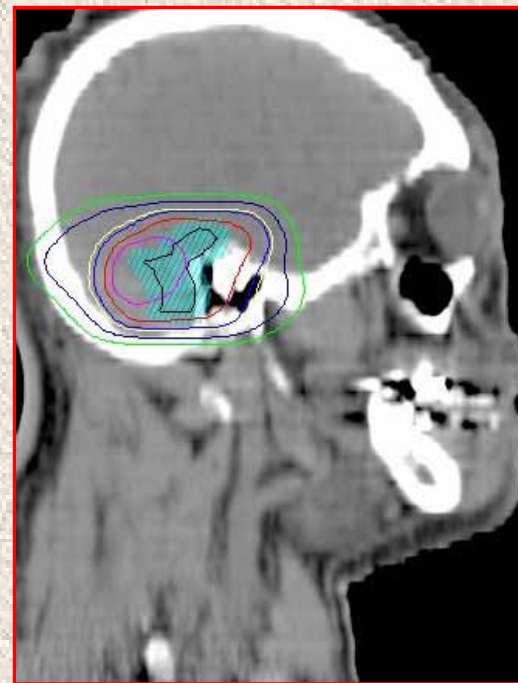
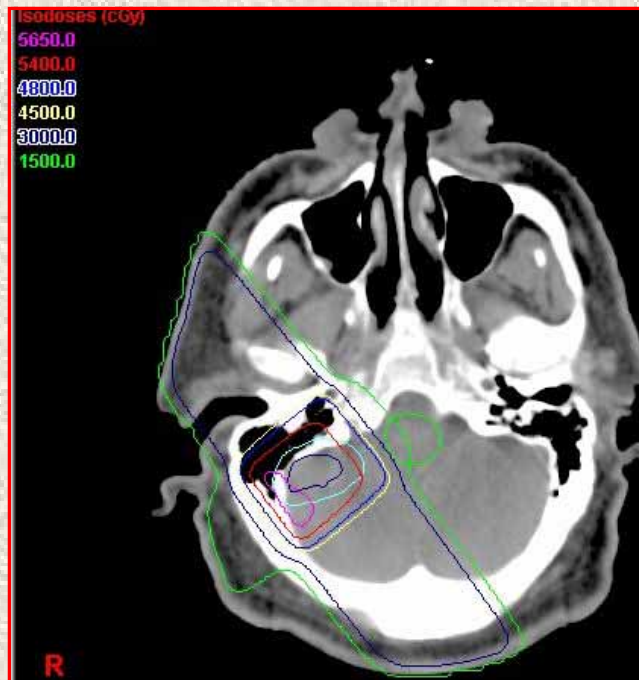
QARC Report

January 2008

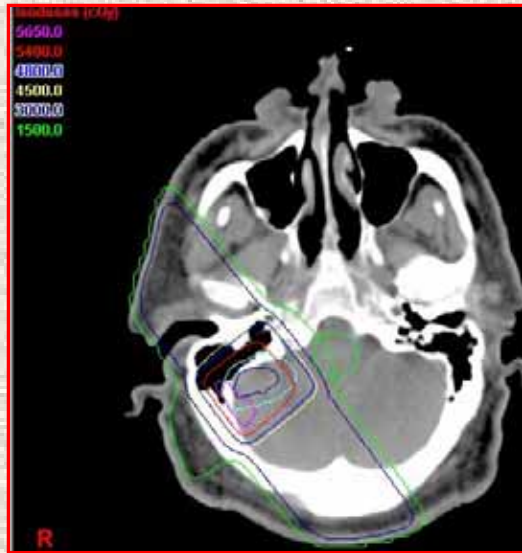
ATC 1/17/08

3D Conformal Benchmark

- Collaborated with RPC in benchmark design
- All submissions to be shared with RPC for use in RPC site visits



3D Conformal Benchmark



- Expand to form PTV
- 54 Gy to PTV
- 48 Gy max to cord/brainstem
- Max doses to optic structures
- Conformity index

- 53 benchmarks submitted**
- 44 approved, 1 approved by RPC**
- 38 submitted electronically**

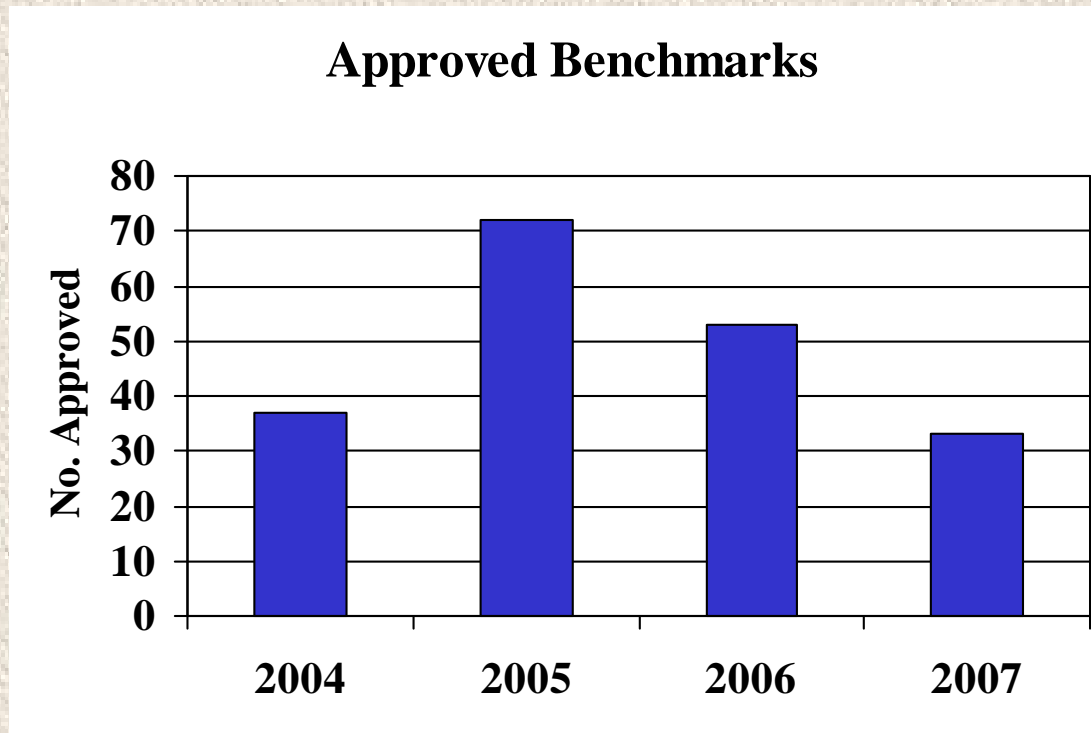
3D CSI and Mantle Benchmarks

- Collaborated with RPC in benchmark design

	CSI	Mantle
Submitted	6	6
Approved	4	4
Electronic	5	5

IMRT Benchmark

- 114 QARC Benchmarks approved
- 115 approved with RPC phantom + Questionnaire

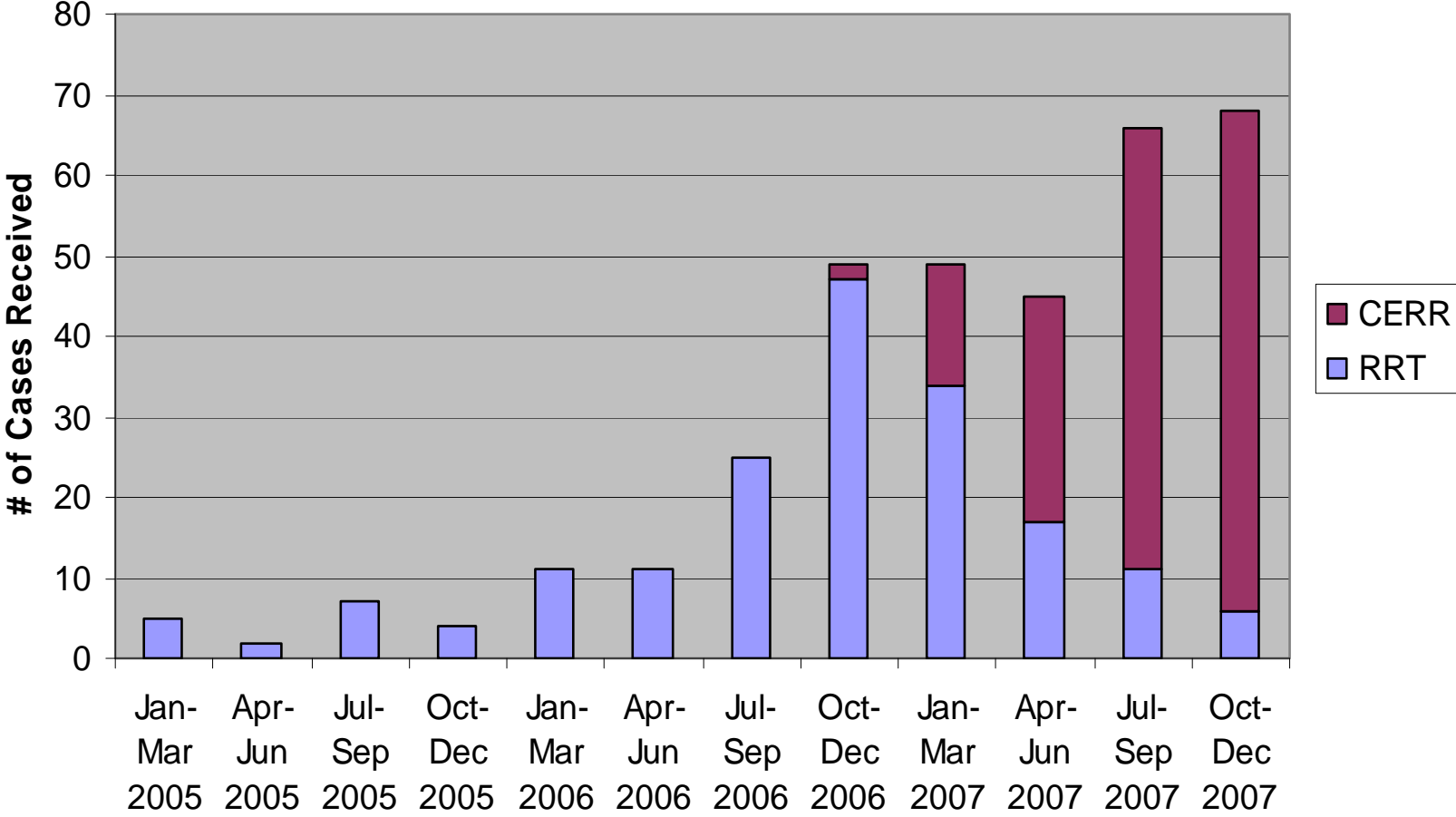


Digital RT Data

Current Accrual (1/10/08)

Protocol	Number of Cases
ACNS0121 (ependymoma)	45
ACNS0126 (High grade glioma)	5
ACNS0331 (std risk medullo)	36
ACOSOG Z4032 (NSCLC)	18
CALGB 80101 (gastric)	11
miscellaneous studies	200
Total of <u>315</u> cases from <u>113</u> institutions on <u>49</u> studies	

QARC Digital RT Data



Use of CERR at QARC

- KU has customized CERR for QARC use.
- More than 150 of the digital RT cases have been imported into CERR.
- A CERR study can be launched directly from a patient's record in the QARC database.
- Teleconference discussions have begun between CERR team, ITC, and QARC to discuss improvements/modifications for QA center use.

ATC → CERR

- Need “ATC” version of CERR

Provide common workspace

Integrate QARC and CERR team/ATC
modifications

Virtual Imaging Evaluation Workspace

The Consortium: ACRIN, QARC, CALGB

NCI RFP

- To provide imaging core laboratory services to the NCI-sponsored cooperative groups
- Develop an inter-operative IT infrastructure for collection, distribution and archiving of images
- Develop standard operating procedures for acquisition and assessment of imaging endpoints including the development of standardized QA and the establishment of quality performance metrics.
- Develop a standardized approach to credentialing facilities that perform imaging exams according to the VIEW standards.

“grid-enabled” QARC database for remote reviewer viewing of imaging (CERR for RT)

To give the remote reviewer exactly the same software interaction experience as they would have if they were at QARC.

Currently, in the grid based review the MAX cache at the remote reviewer desktop would have to have CERR and Matlab to be able to view DICOM RT objects.

- Need “ATC” version of CERR
- Need compiled version of “ATC” CERR

The Consortium

- **ACRIN**'s entire mission is dedicated to imaging clinical trials and has developed a comprehensive imaging core laboratory
- **QARC** has been providing imaging core laboratory support to cooperative groups for radiation therapy planning and more recently imaging core services for 25 years
- **CALGB** has a strong imaging committee with expertise in functional anatomic imaging and has an imaging core laboratory at Ohio State University

NCI RFP

- Establish a consortium to provide imaging core laboratory services to the NCI-sponsored cooperative groups, and, if necessary, other NCI-sponsored clinical trial programs
- Develop an inter-operative IT infrastructure across the network for collection, distribution and archiving of images obtained on NCI-sponsored trials that utilize VIEW. This IT infrastructure will be 21 CFR Part 11 compliant and caBIG compatible.
- Develop standard operating procedures for acquisition and assessment of imaging endpoints in cancer clinical trials and an approach to standardizing newer imaging markers. This includes the development of standardized quality assurance approaches and the establishment of quality performance metrics.

- Develop a standardized approach to credentialing facilities that perform imaging exams according to the VIEW standards.
- Assist clinical trial organizations in the development of an imaging charter that is acceptable to the trial sponsors and FDA.
- Advance the science of imaging biomarker development: explore alternative imaging analysis, alternative imaging approaches, and establish databases that can be mined for testing new approaches.

“grid-enabled” QARC database
for remote reviewer viewing of imaging
(CERR for RT)

The idea is to give the remote reviewer exactly the same software interaction experience as they would have if they were at QARC.

Needs compiled version of
“ATC” CERR

CERR is integrated with MAX, but it is not in MAX. When you click in e-material MAX opens CERR so you can see the file that is linked to the patient record. Both Matlab and CERR need to be installed on the local PC. In the grid based review the MAX cache at the remote reviewer desktop would have to have CERR and Matlab to be able to view DICOM RT objects.

That shouldn't be an obstacle to this first phase pilot, but we should make sure that it is understood correctly. The reviewer MAX will need a **ATC 1/17/08** Matlab license. We talked about a compiled CERR with ATC, but I know from Ken that that hasn't been successful yet. Hopefully, that will