



IROC

Imaging and Radiation Oncology Quality Assurance for the NCTN

Fran Laurie
IROC Rhode Island
November 6, 2015

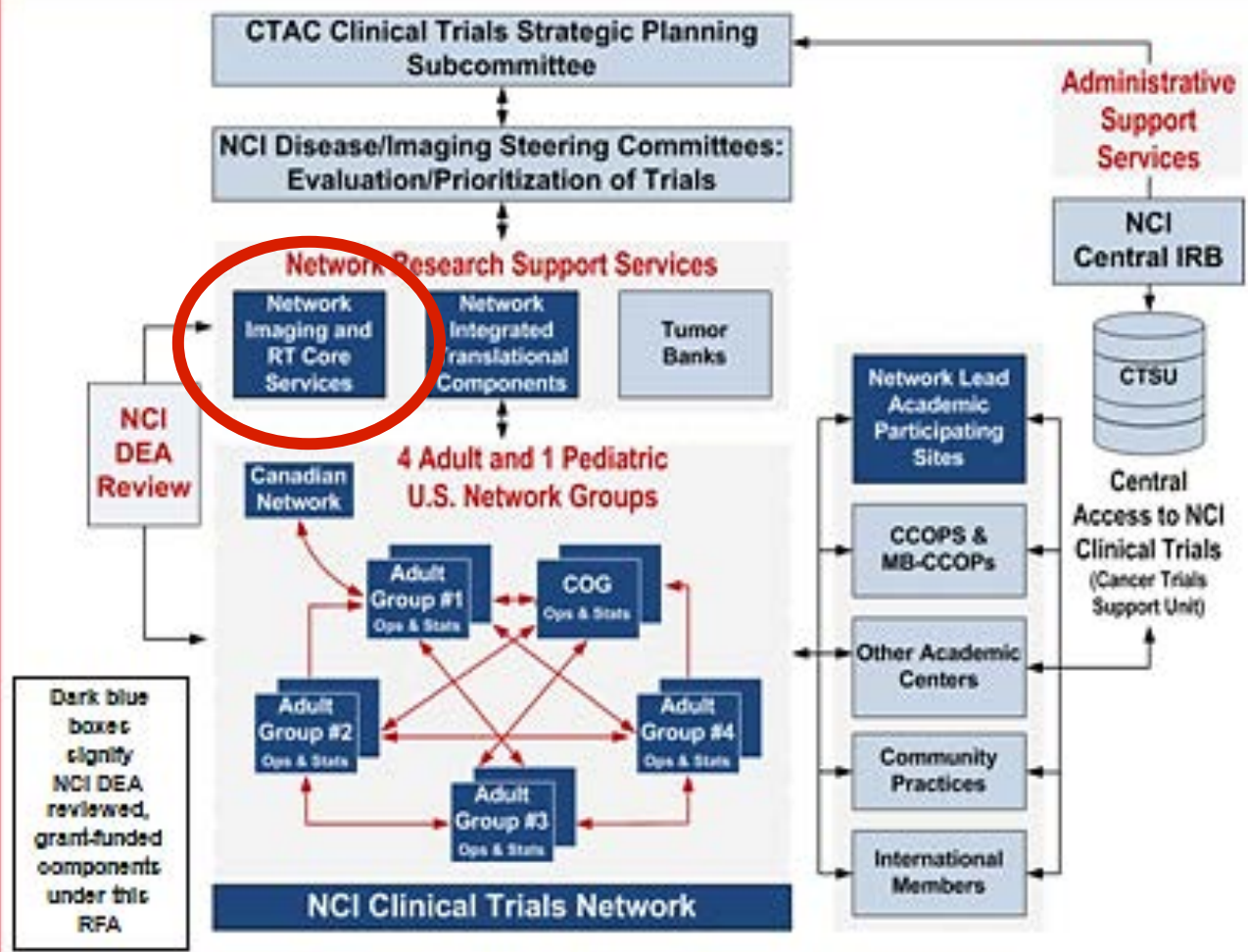
Presentation Objectives

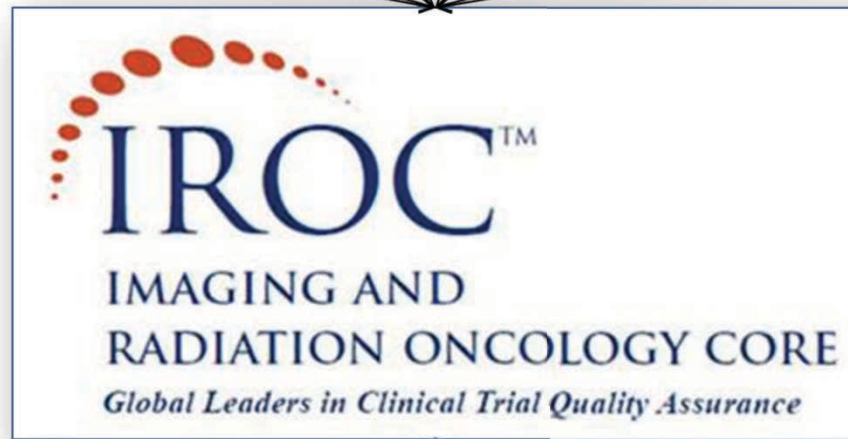
- What is IROC
- Understand IROC's organization and services
- How to interact with IROC
- How are cases reviewed
- Why is QA important
- TRIAD



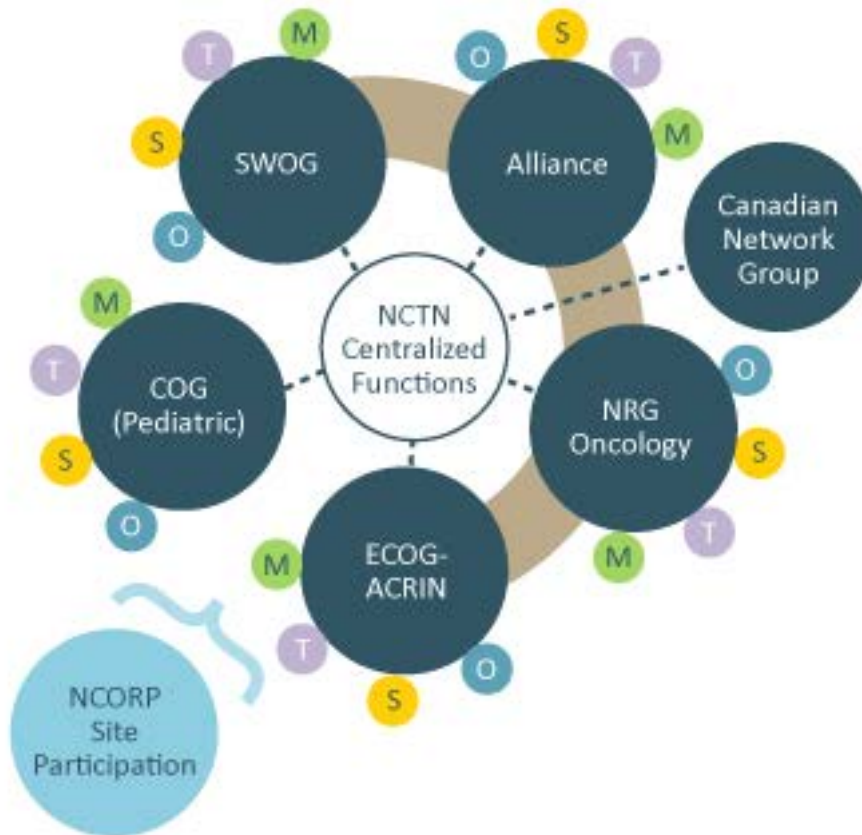


Introducing A New Organizational Structure NCI Clinical Trials Network





NCI National Clinical Trials Network Structure

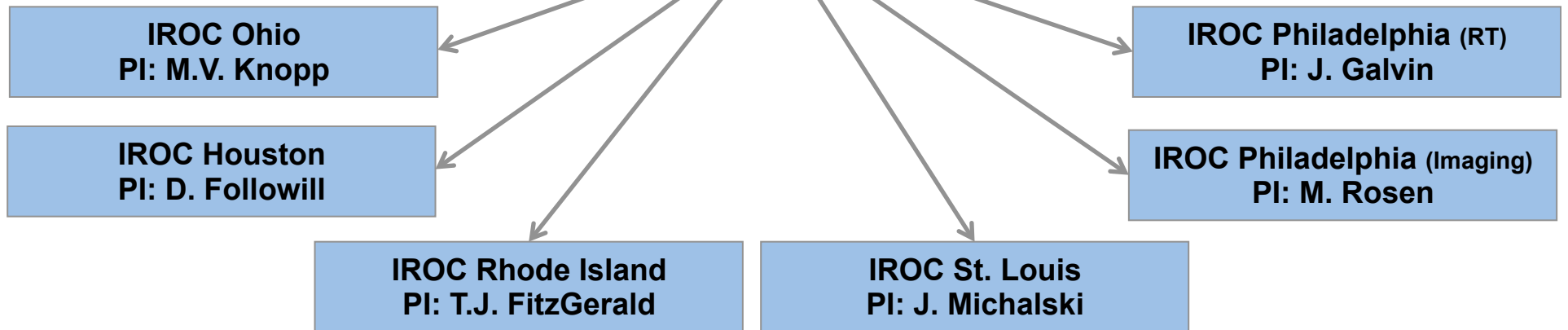


LEGEND

- Centralized Functions:
 - Centralized Institutional Review Board
 - Cancer Trials Support Unit
 - Imaging and Radiation Oncology Core (IROC) Group
 - Common Data Management System
 - Central Hosting
- 30 Lead Academic Participating Sites (LAPS)
- Operations
- Statistics & Data Management
- Tissue Banks
- Member Sites

IROC's Structure

**American College of Radiology Clinical Research Center
in Philadelphia is the Grantee for the IROC Grant**
Sub-awards to:



IROC Executive Committee

Co-Directors: D. Followill, Houston (RT) and M.V. Knopp, Ohio (Imaging)

IROC Admin: King/O' Meara/Laurie



IROC' s Mission

Provide **integrated** radiation oncology and diagnostic imaging **quality control programs** in support of the NCI' s NCTN Network thereby **assuring high quality data** for clinical trials designed to improve the clinical outcomes for cancer patients worldwide



IROC' s Core Services

1. Site Qualification

(FQs, ongoing QA (OSLD, visits), proton approval, resources)

2. Trial Design Support/Assistance

(Key contact QA centers, protocol review, templates)

3. Credentialing

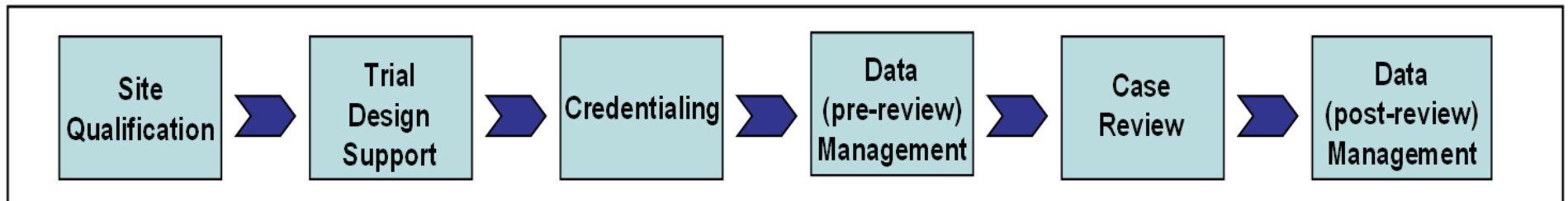
(Tiered system to minimize institution effort)

4. Data Management

(Data collection, pre-review, post-review for analysis)

5. Case Review

(Pre-, on-, post-treatment reviews, facilitate review logistics)



Key Contact QA Centers

NCTN Group	Radiation Oncology	Imaging
Alliance	Rhode Island	Ohio
COG	Rhode Island	Rhode Island
ECOG-ACRIN	Rhode Island	Philadelphia (DI)
NRG Oncology	Philadelphia (RT)	Philadelphia (DI)
SWOG	Rhode Island	Ohio

IROC Houston is the key contact center for all RT credentialing questions.



Site Qualification and Credentialing

- Site Qualification requirements must be completed for sites to be eligible to participate.
 - Enrollment to protocols with RT components requires that the treating RT facilities participate with the IROC Houston monitoring program.
- Credentialing requirements may be protocol specific or may be modality/technique specific.
 - IROC is working to harmonize these requirements across the NCTN Groups to eliminate redundant requirements.



Credentialing

- [ACOSOG](#) [ALLIANCE](#) [CALGB](#) [COG](#) [COMS](#) [CTSU](#) [ECOG-ACRIN](#) [GOG](#) [NCCTG](#)
- [NRG](#) [NSABP](#) [RTOG](#) [SWOG](#) [Credentialing FAQ](#) [Credentialing Status Inquiry](#)

Alliance

- A011202 --- [A RANDOMIZED PHASE III TRIAL EVALUATING THE ROLE OF AXILLARY LYMPH NODE DISSECTION IN BREAST CANCER PATIENTS \(cT1-3 N1\) WHO HAVE POSITIVE SENTINEL LYMPH NODE DISEASE AFTER NEOADJUVANT CHEMOTHERAPY](#)
[Credentialing Requirements](#)
- A021101 --- NEOADJUVANT FOLFIRINOX AND CHEMORADIATION FOLLOWED BY DEFINITIVE SURGERY AND POSTOPERATIVE GEMCITABINE FOR PATIENTS WITH BORDERLINE RESECTABLE PANCREATIC ADENOCARCINOMA: AN INTERGROUP SINGLE-ARM PILOT STUDY -- Closed(1.5.2015)
- A021302 --- [IMPACT OF EARLY FDG-PET DIRECTED INTERVENTION ON PREOPERATIVE THERAPY FOR LOCALLY ADVANCED GASTRIC CANCER: A RANDOM ASSIGNMENT PHASE II STUDY](#)
[Credentialing Requirements](#)
- A071102 --- [A PHASE II/III RANDOMIZED TRIAL OF VELIPARIB OR PLACEBO IN COMBINATION WITH ADJUVANT TEMOZOLOMIDE IN NEWLY DIAGNOSED GLIOBLASTOMA WITH MGMT PROMOTER HYPERMETHYLATION](#)
[Credentialing Requirements](#)



<http://rpc.mdanderson.org/RPC/home.htm>



A031201

6.3 Imaging credentialing and submission

6.3.1 Institutional credentialing procedures for imaging

Prior to the enrollment of patients, institutions that have not previously been credentialed for any other Alliance trials must be credentialed to participate in the trial by the Alliance Imaging Core Laboratory (ICL) at The Ohio State University Medical Center. If the site has previously been credentialed by the ICL to participate in imaging studies, the ICL will provide a brief A031201 protocol refresher prior to the site enrolling patients for this trial. Institutions should contact the Alliance ICL directly to complete credentialing or a refresher for A031201. See [Section 6.3.3](#) for the Alliance ICL contact information.

6.3.2 Individual training for bone scan interpretation

Bone imaging will be interpreted in accordance with modified PCWG2 progression criteria, as described in [Section 13](#). For the purposes of determining progression, the following individuals will perform bone imaging interpretation (in order of preference), and will undergo training in correctly identifying bone scan progression using modified PCWG2 criteria. These individuals are:

- A **reference radiologist** designated by the participating institution or;
- The **local PI or designated local investigator** or;
- In the absence of either a reference radiologist or local investigator, the **Alliance Imaging Core** will perform the interpretation.



Trial Design Support/Assistance

- Review new protocols and amendments
- Ensure that the RT and Imaging guidelines are technically achievable, clearly written and in agreement with NCI guidelines
- Check that QA and data submission requirements are current and appropriate

Data Management

- Data collection
- Data management
- Case evaluation
- Feedback to participating sites
- Submit review data to Statistical Center for study analysis
- Report performance data to IPEC
- Data archiving

[Home](#)

[Contact Us](#)

NCI Groups

[Alliance](#)

[COG](#)

[ECOG-ACRIN](#)

[PBTC](#)

[SWOG](#)



NCI Guidelines

[ATC IMRT Guidelines](#)

[NCI Proton Guidelines](#)

[About](#)

[Cardiac Sparing IMRT](#)

[Pedi Proton Registry](#)

[Links](#)

Alliance for Clinical Trials in Oncology

A center for information related to the merger of scientific and operational activities for:

- [American College of Surgeons Oncology Group \(ACOSOG\)](#)
- [Cancer and Leukemia Group B \(CALGB\)](#)
- [North Central Cancer Treatment Group \(NCCTG\)](#) *New*

Data Submission Information

[Alliance Data Checklists](#)

[Resources](#)

Facility Survey: Please go to the [IROC Houston website](#) to update or complete a Facility Questionnaire.

Alliance Protocol Contact

IROC Rhode Island
Building B, Suite 201
640 George Washington Highway
Lincoln, RI 02865-4207
Phone: (401) 753-7600
Alliance@QARC.org

[Home](#)

[Home](#)

[Contact Us](#)

NCI Groups

[Alliance](#)

[COG](#)

[ECOG-ACRIN](#)

[PBTC](#)

[SWOG](#)

NCI National Clinical
Trials Network

a National Cancer Institute program

NCI Guidelines

[ATC IMRT Guidelines](#)

[NCI Proton Guidelines](#)

[About](#)

[Cardiac Sparing IMRT](#)

[Pedi Proton Registry](#)

[Links](#)


Alliance for Clinical Trials in Oncology

Checklists

 [A011202 Checklist](#)

 [A021302 Checklist](#)

 [CALGB 30610 Checklist](#)

 [CALGB 31102 Checklist](#)

 [CALGB 50801 Checklist](#)

 [CALGB 70806 Checklist](#)

 [CALGB 80803 Checklist](#)

 [N1048 Checklist](#)

 [Z11102 Checklist](#)

Alliance Protocol Data Manager
IROC Rhode Island
Building B, Suite 201
640 George Washington Highway
Lincoln, RI 02865-4207
Phone: (401) 753-7600
Alliance@QARC.org

[Home](#)

ALLIANCE A011202

Checklist for Submission of Radiation Oncology Quality Assurance Materials

Patient Initials: _____ Registration #: _____ RT Start Date: _____
Sender's Name: _____ Phone #: _____
Email: _____
Radiation Oncologist: _____ Email: _____

Please enclose a copy of this Checklist together with the RT materials you submit. All materials must be labeled with the protocol and assigned registration number.

Digital treatment plan, screenshots of other RT data and diagnostic imaging may be submitted via sFTP or on CD. For data sent via sFTP, a notification email should be sent to sFTP@qarc.org with the **protocol # and registration # in the subject line**. Please refer to IROC Rhode Island website for instructions on sending digital data (www.QARC.org).

Data not sent via sFTP may be sent via email to datasubmission@qarc.org with the **protocol # and registration # in the subject line**. Data may also be sent via courier to the address below.

The following materials must be submitted prior to the start of radiotherapy for pre-treatment review:

DATE
SUBMITTED

_____ Operative & pathology reports for lumpectomy/mastectomy procedure
_____ Copy of digital RT Treatment Plan (DicomRT or RTOG format)
_____ Treatment planning system summary report that includes the MU calcs, beam parameters, calculation algorithm, and volume of interest dose statistics
_____ DRRs of each treatment field (3D) or orthogonal isocenter images (IMRT)
_____ Prescription sheet for the ENTIRE treatment
_____ RT-1 Dosimetry Form www.qarc.org/forms/IROC_RT-1DosimetrySummaryForm.pdf
_____ Motion Management Reporting Form (if applicable) www.qarc.org/forms/IROC_MotionManagementForm.pdf
_____ Explanation if recommended doses to organs at risk are exceeded

Final Review materials must be submitted within 1 week of the completion of radiation:

_____ Completed RT Daily Treatment Chart, including prescription, daily and cumulative doses
_____ RT-2 Total Dose Record www.qarc.org/forms/IROC_RT2RadiotherapyTotalDoseRecord.pdf
_____ Documentation listed above showing modifications from the original submission (if not previously submitted).

Please contact study CRA by email (alliance@qarc.org) or phone: (401) 753-7600 for clarification as necessary. Thank you for your ongoing co-operation.



QARC Number: Principal Institution: 1MC RT Dept: Group Status:
 Protocol: Regimen: B Actual Protocol: 30610 NCI#:
 Case Number: Accession No.: Record Created: 01/20/2015
 Date of Birth: On Study Age: M/F: F Letters
 On Study Date: Summary Due Date: 04/12/2015 Radiation Oncologist: Narayan
 First RT Date: 02/10/2015 Data Final Date: 07/21/2015 Data Received within specified period:
 RT Conditional: N Received On-TX: Y RT Start Compliance:
 Interventional Review Impact: Intervention Days to RT Start: 25

Number	Target Volume	On TX	#Rev	Review	Status	Comments
1	PTV1	Y		A	F	
1T1	PTV2	E		A	F	
2	Brain	X			F	
*						

Undo Changes Total Number of Target Volumes 3

Comments: Mtg: Final Review Pending.
 Performance Evaluation: / / RT Status: C IMRT: Y Brachy:
 All Credentials Met: Y Date: 8/28/2015 User: 3D: SRS:
 Proton: Print
 Chart Page Print Options DX Status C

QARC Number: Case Number: Accession No.:

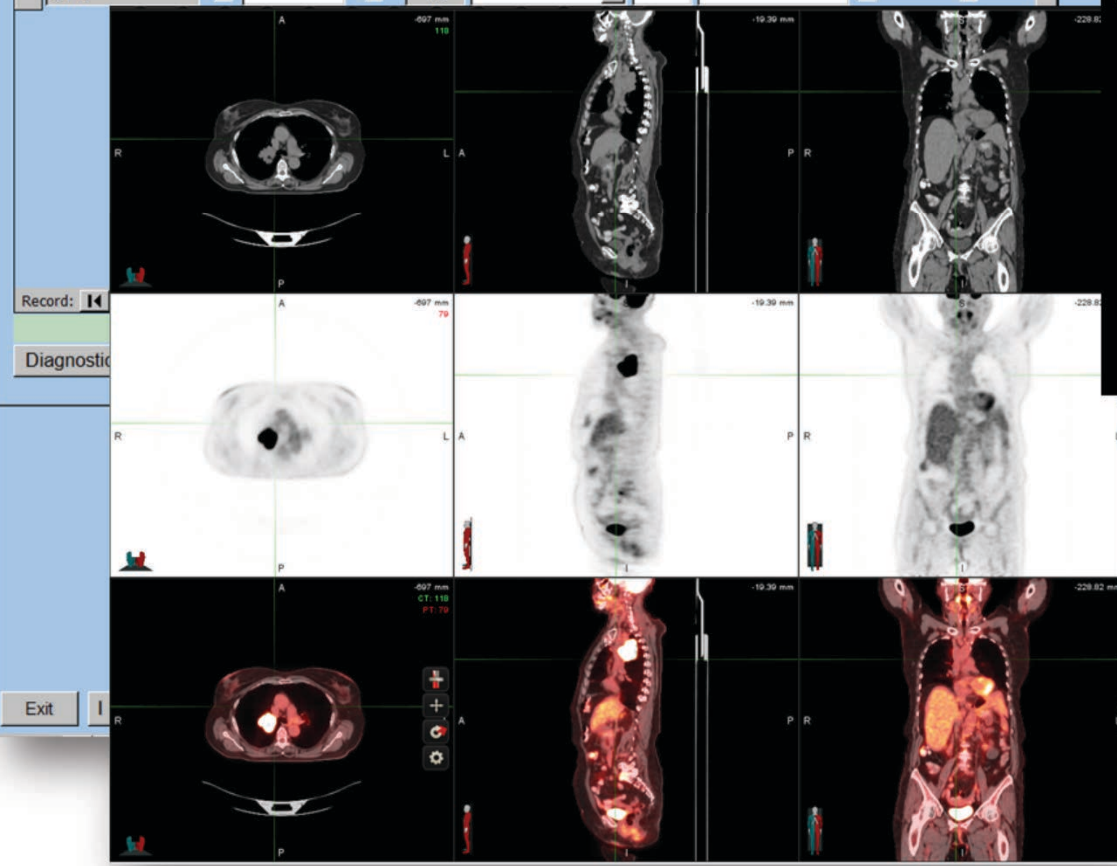
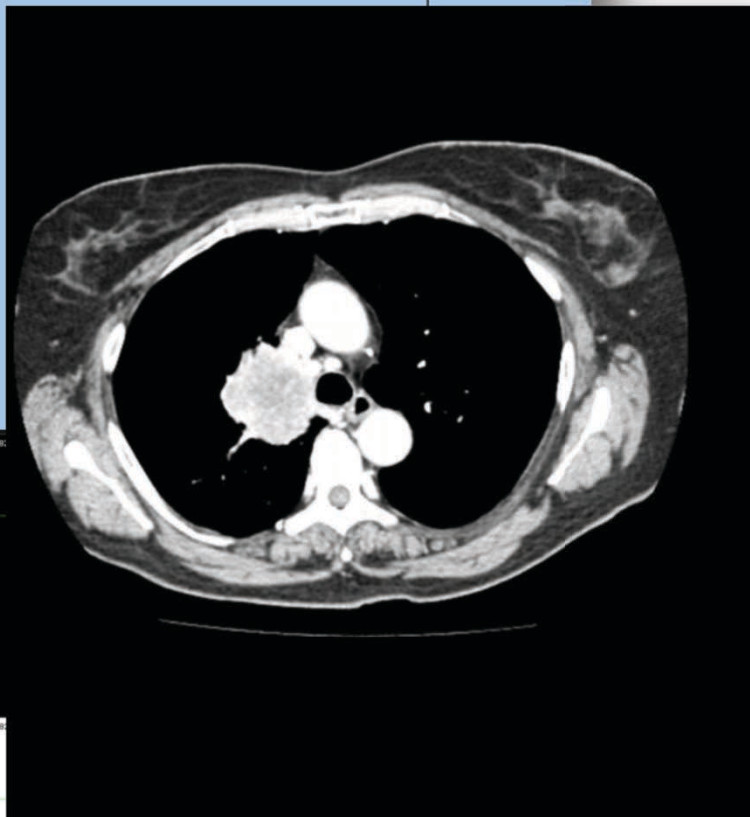
Diagnostic Comments:

Note: Keep Event and Study Name Lengths within | guidelines | to insure proper fit in rpt qryDiagnostic Crosstab fields

Event	Order	Event Date	Interval Comments
C3610 Pre-Study	10		

Record: 1 of 2

Study	N/A	Study Date	Rewrd	Order	eImage Type	CD	Comments	Form	Remote Review
Chest CT	<input type="checkbox"/>	01/14/2015	<input type="checkbox"/>	10	DICOM	1		<input type="checkbox"/>	<input checked="" type="checkbox"/>
PET	<input type="checkbox"/>	01/07/2015	<input type="checkbox"/>	20	DICOM	1		<input type="checkbox"/>	<input checked="" type="checkbox"/>
CT-2	<input type="checkbox"/>		<input type="checkbox"/>	30				<input type="checkbox"/>	<input type="checkbox"/>
CT-3	<input type="checkbox"/>		<input type="checkbox"/>	40				<input type="checkbox"/>	<input type="checkbox"/>



Exit

Diagnostic Comments

Return



Data Status | DS 3C | Review Data | Clinical 1 | Clinical 2 | Mail | **eMaterials** | Intervention | Logs | Benchmark | Remote Rev. | Imaging

QARC Number: _____ Case Number: _____ Accession No: _____

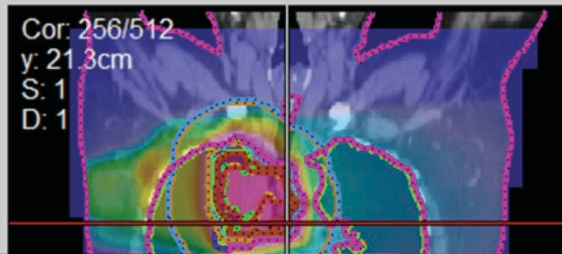
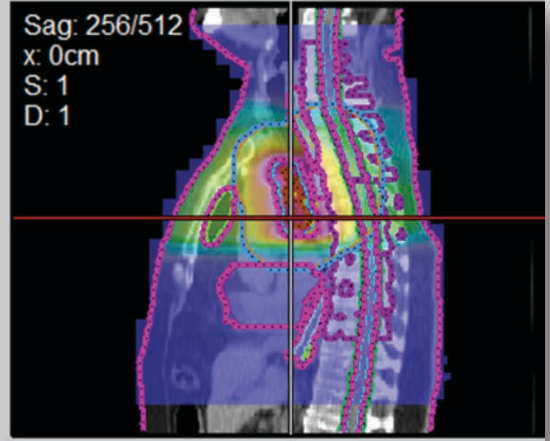
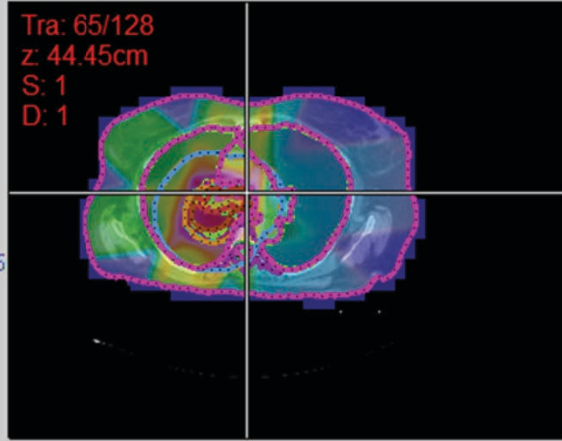
14 Item(s) Exist

Data Type ASC	Category ASC	Target Volume ASC	E
Digital RT	Digital Plan	All	
Description: Planning CT/structures/composite dose plan			
Comment:			
CLBIC			
RT	QARC Forms	All	
Description:			
Comment: Motion Management Form			
0001_			
RT	QARC Forms	All	
Description:			
Comment: RT-1Form			
0002_			
Dx	Reports	Unassigned	
Description:			
Comment: CT report 12.16.14			
0003_			
RT	IMRT Dose Verification	All	
Description:			
Comment: IMRT QA			
0004_			

Dose
74.5 74.5

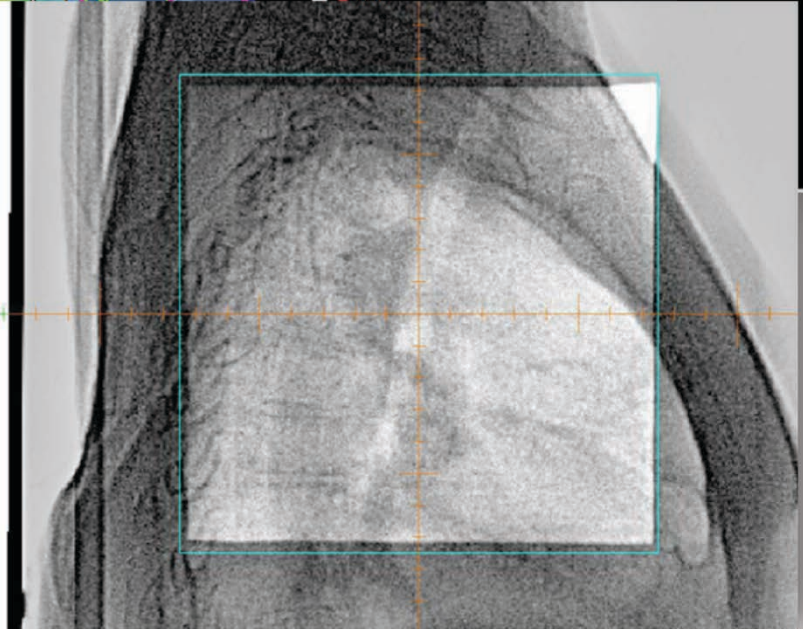
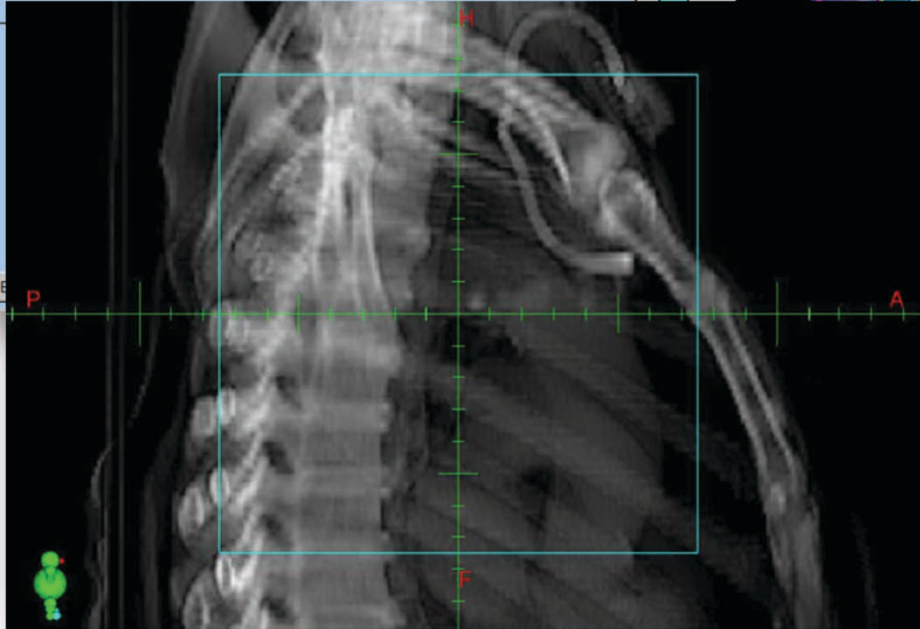
Scan

eMaterials Types | Delete Item | Print | View File



Legend

- ◆ GTV
- ◆ LUNG_R
- ◆ LUNG_L
- ◆ SPINAL CORD
- ◆ HEART
- ◆ CARINA
- ◆ ESOPHAGUS
- ◆ ITV
- ◆ CORD +.3CM
- ◆ CTV2
- ◆ PTV-2
- ◆ VERTEBRA
- ◆ RING2
- ◆ NORMAL TISSUE
- ◆ UNSPECIFIED TISSUE



Case Review

- **Diagnostic Imaging Central Reviews**
 - Confirm eligibility and staging
 - Confirm response
 - Confirm progression/relapse
 - Correlate patterns of failure
 - Can be performed in real-time to direct patient treatment or retrospective to confirm local patient management and reporting
 - Can be performed on-site or remotely using secure VPN connections
- **RT Reviews**
 - Interventional reviews (pre-treatment or early on-treatment) to assure that patient's treatment plan is per protocol requirements. Possible to modify planning to protocol compliance
 - Post treatment reviews performed to confirm patient's treatment was delivered per protocol. RT details from this review are transferred for protocol analysis.

QARC Number: [] Principal Institution: 1MC RT Dept: [] Group Status: []
 Coop Group: ALL
 Protocol: [] Regimen: B Actual Protocol: 30610 NCI#: []
 Case Number: [] Accession No.: [] Record Created: 01/20/2015
 Date of Birth: [] On Study Age: [] M/F: F
 On Study Date: [] Summary Due Date: 04/12/2015 Radiation Oncologist: Norayan
 First RT Date: [] Data Final Date: 07/21/2015 Data Received within specified period: []
 RT Conditional: N Received On-TX: Y RT Star: []
 Interventional Review Impact: [] Intervention

Date Printed	Sent	Date Sent	Letter Type	Letter Class	Created By	Flag	Issue ID	Resp. Date
7/15/2015	<input checked="" type="checkbox"/>	07/15/2015	Request	Email	kathryn	N		
7/10/2015	<input checked="" type="checkbox"/>	07/10/2015	Request	Email	kathryn	N		
4/7/2015	<input checked="" type="checkbox"/>	04/07/2015	General	Email	ngavitt	N		
2/17/2015	<input checked="" type="checkbox"/>	02/17/2015	OnTx	Email	karim	N		
2/12/2015	<input checked="" type="checkbox"/>	02/12/2015	OnTx	Email	karim	N		
1/20/2015	<input checked="" type="checkbox"/>	01/20/2015	Early	Email	esther	N		

Number	Target Volume	On TX	#Rev	Review	Status	Comments
1	PTV1	Y		A	F	
1T1	PTV2	E		A	F	
2	Brain	X			F	

IROC RI (QARC) eMail On-Treatment Correspondence

From: ktoole@qarc.org
Sent: Tuesday, February 17, 2015
To:
Cc:
Subject:

, MD
 Tuesday, February 17, 2015
 Dear Doctor

We have reviewed the on treatment data submitted for your patient, who has been entered on Alliance Protocol 30610.

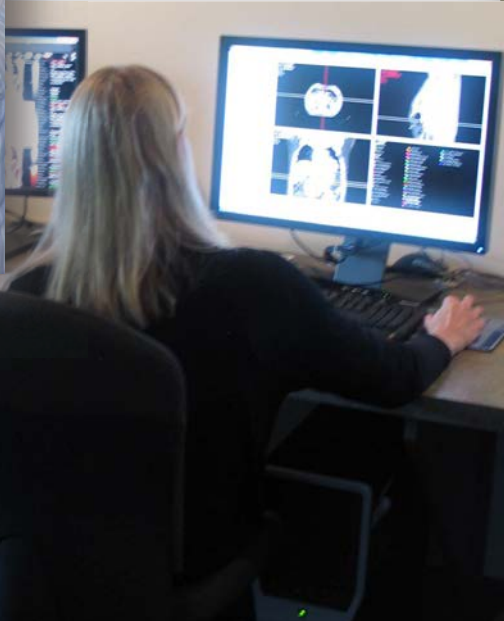
I appreciate receiving the imaging and radiation therapy treatment objects which appear to meet study guidelines. There is trace uptake in both R and L region 10 of uncertain significance. The SUV of both is less than liver (3.13 using the MIM viewer), however neither appears to meet size criteria for disease. Your participation in this study is appreciated.

We look forward to receiving the RT-2 form and daily RT treatment chart once RT is complete.

Sincerely Yours,
 T.J. FitzGerald, MD
 Director
 TJF/krt
 IROC RI (QARC)
 640 George Washington Highway

SR: []
 Proton: []
 Print

Patients Reports | Diagnostic Comments | Return



PATIENT RT REVIEW DATA SUMMARY

Name: RT Dept:
 Acc. Number: Case Number:
 Coop Group: Protocol: Rad. Oncologist:

Dose Summary							
Target Volume	Average Fraction Dose	Protocol Fraction Dose	Fraction Dose Variation	Total Dose	Protocol Total Dose	Total Dose Variation	Volume Compliance
Esophagus	180 cGy	180 cGy	0 %	5040 cGy	5040 cGy	0 %	Appropriate

Reference Points					
Reference Point	Reference Point Name	Dose Received	Protocol Dose	Percent Variation	
A	Cord	4182 cGy	0-4500 cGy	0 %	
B	Stomach	5365 cGy	0-5400 cGy	0 %	

QARC Comments

Volumes and doses are appropriate.

Thank you for submitting this data to us and for participating in this study. We are available to discuss this review with you.

cc:

 28-Aug-2015

T.J. FitzGerald, MD
Director

Phone: (401) 753-7600 Fax: (401) 753-7601



Importance of QA



Critical Review

Does Quality of Radiation Therapy Predict Outcomes of Multicenter Cooperative Group Trials? A Literature Review

Alysa Fairchild, MD, FRCPC,* William Straube, MSc,[†] Fran Laurie, BSc,[‡] and David Followill, PhD[§]

*Department of Radiation Oncology, Cross Cancer Institute, Consortium, Imaged-Guided Therapy QA Center, St. Louis, Missouri; and [†]Radiological Physics Center, University of Texas

Received Nov 17, 2012, and in revised form Mar 29, 2013. Accepted

***Conclusion:** Current reports suggest protocol-compliant RT tends to decrease failure rates & increase overall survival, and likely contributes to the ability of the collected data to answer the central trial question.*

Dharmarajan, K.V., et.al. (2015). Radiotherapy quality assurance report from children's oncology group AHOD0031. International Journal of Radiation Oncology, Biology, Physics, 91(5):1065-1071.

This paper sets the standard for the clinical trial research testing the value of RT, and demonstrates that the time, money, effort of doing an extensive RT QA review is mandatory if the overall study results are to be believed. Also it shows the importance of physician education so to improve performance and decrease protocol deviations, with improved protocol compliance.

Radiation Field Design in the ACOSOG Z0011 (Alliance) Trial

Reshma Jagsi, Manjeet Chadha, Janaki Moni, Karla Ballman, Fran Laurie, Thomas A. Buchholz, Armando Giuliano, and Bruce G. Haffty

Reshma Jagsi, University of Michigan, Ann Arbor, MI; Manjeet Chadha, Beth Israel Medical Center, New York, NY; Janaki Moni, University of Massachusetts Medical School, Worcester, MA; Fran Laurie, Quality Assurance Review Center, Lincoln, RI; Karla Ballman, Alliance Statistics and Data Center, Mayo Clinic, Rochester, MN; Thomas A. Buchholz, MD Anderson Cancer Center, Houston, TX; Armando Giuliano, Cedars-Sinai Medical Center, Los Angeles, CA; and Bruce G. Haffty, Rutgers-Cancer Institute of New Jersey, New Brunswick, NJ.

A B S T R A C T

Purpose

ACOSOG Z0011 established that axillary lymph node dissection (ALND) is unnecessary in patients with breast cancer with one to two positive sentinel lymph nodes (SLNs) who undergo lumpectomy, radiotherapy (RT), and systemic therapy. We sought to ascertain RT coverage of the regional nodes in that trial.

Methods

We evaluated case report forms completed 18 months after enrollment. From 2012 to 2013, we collected all available detailed RT records for central review.

Results

Among 605 patients with completed case report forms, 89% received whole-breast RT. Of these, 99.45% were recorded as also receiving treatment to the axillary region. Detailed RT

Z0011 was an important clinical trial that demonstrated limited axillary surgery was efficacious and tangential RT was appropriate in patients with limited nodal involvement. The protocol included guidelines for the tangential adjuvant RT but there was no central review of the dose and volume during the trial. After the primary paper was published, efforts were made by Reshma Jagsi and QARC colleagues to review the RT information.

These data demonstrated a number of study patients were treated with regional RT and some patients received no RT at all. This further complicates strategies for future studies as the role of limited regional RT in breast cancer care remains ambiguous. If imaging and RT information had been acquired on-study, including relapse imaging, defining axillary volume for current NCTN studies would be based on more secure evidence.

Tirapazamine, Cisplatin, and Radiation Versus Cisplatin and Radiation for Advanced Squamous Cell Carcinoma of the Head and Neck (TROG 02.02, HeadSTART): A Phase III Trial of the Trans-Tasman Radiation Oncology Group

Objectives

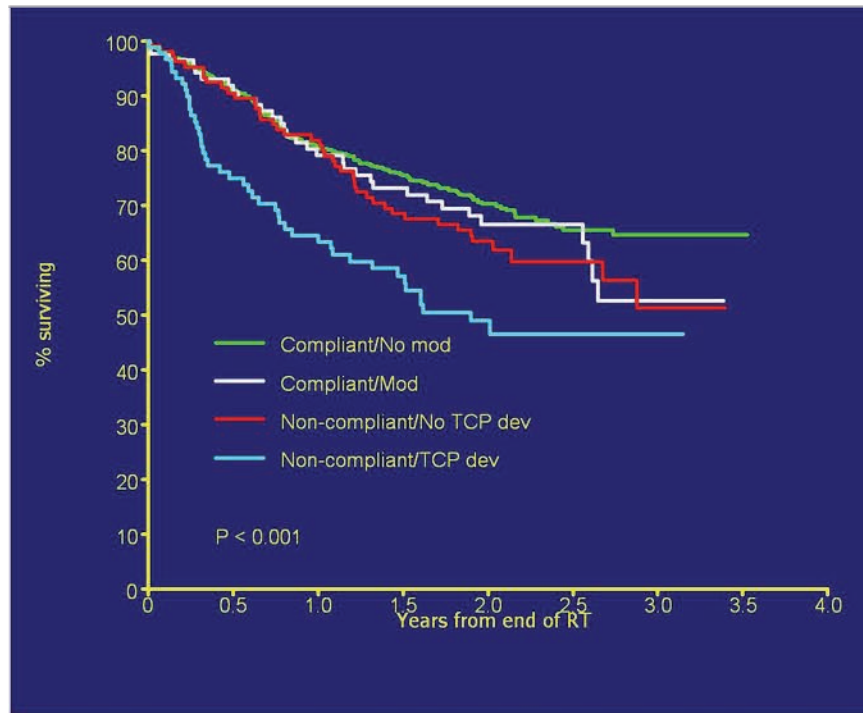
- To analyze the impact of protocol non-compliance and poor radiotherapy quality on the outcome of treatment in patients with loco-regionally advanced squamous cell carcinoma of the oral cavity, oropharynx, hypopharynx or larynx
- International phase III registration trial TROG 02.02 “HeadSTART” designed to test the efficacy of adding the hypoxic cell cytotoxin tirapazamine (TPZ) to cisplatin-based chemoradiotherapy
- 853 eligible patients from 81 sites in 16 countries enrolled Sep 02 - Apr 05
- Median potential FU 2.3 yrs (range 20 days -3.7 yrs)

Results

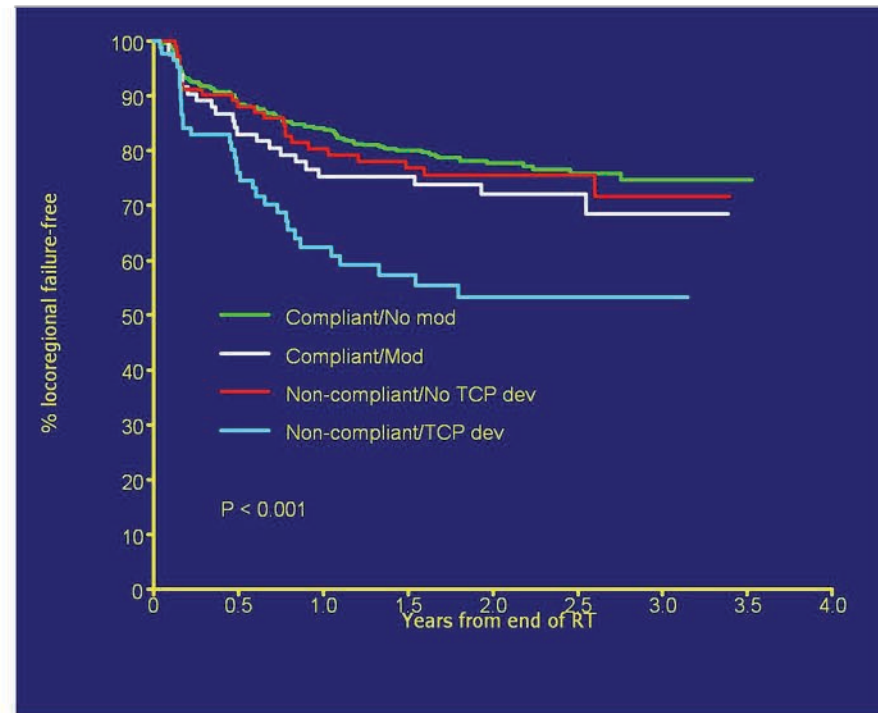
- In contrast to the randomized Phase II trial TROG 02.02 showed essentially no differences between the arms in any of the key endpoints: Overall survival, Disease-free survival and Freedom from locoregional failure
- **Major impact of radiotherapy quality which compromised interpretation of the results**



Critical impact of radiotherapy protocol compliance in the treatment of advanced HNSCC: Results from TROG 02.02



Overall survival by deviation status



Time to LRF by deviation status

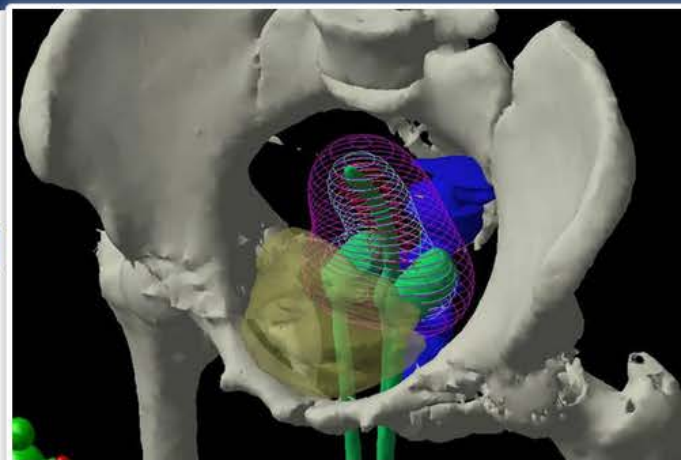
Peters LJ, O'Sullivan B, Giralt J, Fitzgerald TJ, Trotti A, Bernier J, Bourhis J, Yuen K, Fisher R, Rischin D. **Critical impact of radiotherapy protocol compliance and quality in the treatment of advanced head and neck cancer: results from TROG 02.02.** *J Clin Oncol.* 2010 Jun 20;28(18):2996-3001

TRIAD: TRansfer of Image And Data

- Developed by the American College of Radiology (ACR)
- Customized for use with NCTN trials and integrated with Rave
- Sophisticated anonymization ability to de-identify PHI in DICOM
- Will be used in all NCTN trials to transfer Diagnostic Imaging and Digital Radiotherapy Data
- Currently being phased into Alliance Trials
 - As new Trials are activated will be set up to allow use of TRIAD.
 - First trial is A071401.
- Access to TRIAD is controlled by User roles on the Site's roster



<https://www.irocqa.org/>




Global Leaders
in Imaging and
Radiation Oncology
Clinical Trial
Quality Assurance

Welcome

Welcome to the Imaging and Radiation Oncology Core (IROC) website. Our overarching goal is to provide easy access to information about IROC's quality assurance (QA) services and processes for individuals at sites participating in NCI-sponsored trials.

We welcome your comments and suggestions. Please **contact us!**



IROC has been awarded a grant by the National Cancer Institute (NCI) as a member of the NCI National Clinical Trials Network (NCTN).

[Contact Us](#)

[View Our Services](#)

[Why Is QA Important?](#)

Announcements



IROC launches its website to support the continuum of imaging and radiotherapy quality assurance services for the National Cancer Institute's National Clinical Trials Network.

[read more...](#)

Welcome

Welcome to the Imaging and Radiation Oncology Core (IROC) website. Our overarching goal is to provide easy access to information about IROC's quality assurance (QA) services and processes for individuals at sites participating in NCI-sponsored trials.

We welcome your comments and suggestions. Please **contact us!**



IROC has been awarded a grant by the National Cancer Institute (NCI) as a member of the NCI National Clinical Trials Network (NCTN).

[Contact Us](#)

[View Our Services](#)

[Why Is QA Important?](#)

Announcements



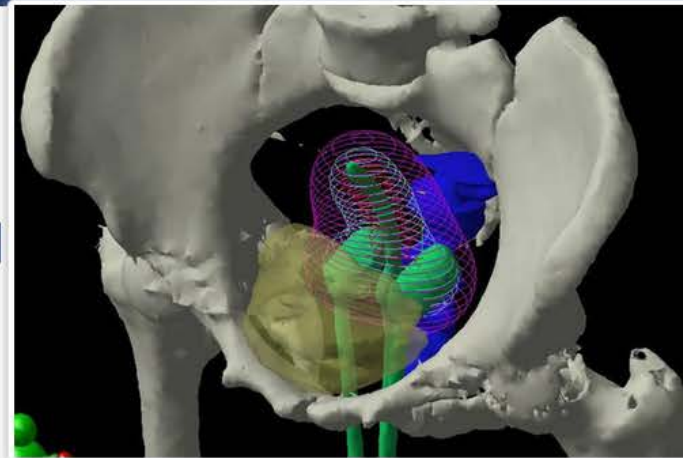
IROC launches its website to support the continuum of imaging and radiotherapy quality assurance services for the National Cancer Institute's National Clinical Trials Network.

[read more ...](#)

Quality Assurance Centers

- ▶ ACR Diagnostic Imaging Core Laboratory
IROC Philadelphia - Imaging
- ▶ Imaging Core Laboratory
IROC Ohio
- ▶ Image Guided Therapy Center
IROC St. Louis
- ▶ Quality Assurance Review Center
IROC Rhode Island
- ▶ ACR Radiation Oncology Core Laboratory
IROC Philadelphia - RT
- ▶ Radiological Physics Center
IROC Houston

<https://www.irocqa.org/>



Global Leaders
in Imaging and
Radiation Oncology
Clinical Trial
Quality Assurance

Welcome

Welcome to the Imaging and Radiation Oncology Core (IROC) website. Our overarching goal is to provide easy access to information about IROC's quality assurance (QA) services and processes for individuals at sites participating in NCI-sponsored trials.

We welcome your comments and suggestions. Please **contact us!**



a National Cancer Institute program

IROC has been awarded a grant by the National Cancer Institute (NCI) as a member of the NCI National Clinical Trials Network (NCTN).

[Contact Us](#)

[View Our Services](#)

[Why Is QA Important?](#)

Announcements



IROC launches its website to support the continuum of imaging and radiotherapy quality assurance services for the National Cancer Institute's National Clinical Trials Network.

[read more...](#)

TRIAD

[TRIAD for RT
QA](#)

[Contouring
Atlases](#)

[QA
Publications](#)

[Contact Us](#)

[• Web Support](#)

TRIAD

TRIAD (Transfer of Images and Data) is a Web-based application that provides secure, efficient, and robust transmission of medical images and related electronic data. Developed and maintained by the American College of Radiology (ACR) with a focus on user-friendliness, TRIAD supports the exchange of electronic images and data for the multi-center clinical trials and other clinical research projects. Also, TRIAD has been adopted for use by the ACR's accreditation programs and National Radiology Data Registry.

A new TRIAD website has recently launched. Visit <http://triadhelp.acr.org/> to learn more about how this tool supports imaging and radiation quality assurance for the NCI National Clinical Trials Network.



Quick Links to TRIAD Resources

[TRIAD Fact Sheet](#)

[CTEP IAM Account Registration Link](#)

[TRIAD Installation and User Guide](#)