

# RTOG Report to ATC Steering Committee





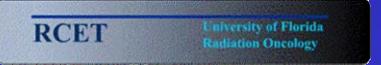




AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE



Radiological Physics Center









## RTOG Headquarters Provides:

- Medical Dosimetrist QA review of advanced technology clinical trials using the ATC web-based remote review tools (RRT).
- Dose-volume analysis of case data in RTOG protocols.
- RTOG HQ staff arranges for conference calls.
- A review of all advanced technology protocols that are developed through the ATC to help ensure uniformity of guidelines.
- Expertise in maintaining and improving in electronic links between RTOG's clinical trial database and the ITC's treatment planning and verification (TPV) database;



## RTOG Headquarters Provides (cont.)

- Credentialing process monitoring through the ITC and RPC.
- Identify and implement common ID numbers for pts on RTOG protocols
- Collaboration with NSABP for the Phase III PBI breast cancer trial.
- Resource for continued learning/education of the credentialing processes for Advanced Technology protocols.





# ATC Review Workstation at RTOG HQ's in Philadelphia, PA







#### IMAGE-GUIDED THERAPY CENTER [ITC]

#### Protocol RTOG-P0126 Dose-Volume Analysis QA Review for: Cross Cancer Institute

Patient Initials: P. W. Case #: 9 0126c0009

Group: 2 Dose Level: Rx Dose: 72.93 (See Appendix I)

#### A. TARGET VOLUME ANALYSIS

Target	Volume (cc)	Pe Receivi		Volume Ex Dose		ICRU Ref Dose (Gy)			Mean Dose (Gy)	Coverage Score
PTV1	310	100	%≥55.8 Gy		73.0	74.4	57	73	1	
PTV2	242.4	100	%≥	70.2 Gy		75.0	74.4	68	73.4	1
PTV			%≥	Gy		•				
CTV	113	99.3	%≥	70.2	Gy		74.4	65.4	74	1
GTV	89	100	%≥	70.2	Gy		74.2	72	74	1

Target Volume Coverage Score:  $1: V_{RxD} \ge 98\%$ ,  $2:95\% \le V_{RxD} < 98\%$ ,  $3: V_{RxD} < 95\%$  or

V<sub>RxDCTVorGTV</sub><100%.

#### B. DOSE HETEROGENEITY(DH) And CONFORMITY

	Conformity Index*	Dose Heterogeneity	Dose Heterogeneity Score
PTV(2		1.02 ✓	1

Dose Heterogeneity (2% Max Dose/Rx dose):  $1: DH \le 1.07, \ 2: 1.07 < DH \le 1.10, \ 3: DH > 1.10$ 

#### C. NORMAL STRUCTURE ANALYSIS (See appendix II for standard structure names)

Normal Tissue	Volume (cc)	% Vol ≥ Ref Dose (D1)	Ref Dose (D1) (Gy)	Max Dose (Gy)	Mean Dose (Gy)
Bladder	112	50	65.0	74.4	61.1
Left Femur	192	0	52.0	41	34.4
Right Femur	187	0	52.0	42	33.0
Rectum	87	30	60.0	74.3	49
Penile Bulb	9.3	55.2	70.0	73	68
Unspecified Tissue	23710	0.9	58.9	74.4	8

After completing this form please FAX to the ITC: (314)747-5423.

American College of Radiology



#### Plan Summary

Wedge (Normal): . . . Wedge Orientation: .

ICRU Ref Pt (cGy):. .
Pilms Link/Aligned: . .

Page 1 of 1

1162 TI

#### Image-guided Therapy Center

Page 1 of 2 Next Close

1159 TD

Protocol: 0126 Case: 0009 ) Plan Date: Mon Nov 18 11:06:31 200: Plan Description: composite plan (Plan ID: totalhetero Calculation Volume Size: Width(x) 42.3 (cm) x Depth(y) 28.8 (cm) x Height(z) 26.1 (cm) [142 x 145 x 88] Center: X = 0.8, Y = -2.1, Z = 3.1 SITE: Prostate MD: cross >Ant(B1) >Left(B4 Beam # (Field): . . . >Right (B3) POST (B2) 15MVXRAYS 15MVXRAYS 1.5MVXRAY! 100.0 cm SAD 100.0 cm SAD 001(\_\_\_\_) 20.4 cm 0.8, -3.9, 2.7 cm -19.5, -3.9, 2.7 cm ODI(\_\_\_\_) 12.5 cm 0.8, -3.9, 2.7 cm 100.0 cm SAI 100.0 cm SAD ODI(\_\_\_\_) 20.1 er 0.8, -3.9, 2.7 er 20.9, -3.9, 2.7 er Isocenter Depth: . . Isocenter Coord: . . ODI(\_\_\_\_\_) 11.4 cm 0.8, -3.9, 2.7 cm 0.8, -3.9, 14.1 cm 0.8, -3.9, -9.8 cm Entry Point: . . . . 5.2 cm 5.1 cm 4.8 cm 4.1 cm 4.0 er 5.0 cm Coll. Width(cone):. . X1: X1: 5.0 et 6.3 et X2: X2: X2: 302 : 12.5 cm Coll. Length(cone): . 6.3 cm 12.5 cm Y1.: Y2: 6.1 cm 180 degree: 180 degrees 180 degrees Collimator Angle: . . 180 degrees 180 degrees 180 degrees 180 degrees Head to Gantry Couch Angle: . . . . Head/Foot Orient: . . 180 degrees Read to Gantry 270 degrees Head to Gantry Head to Gantry 90 degrees 180 degrees 360 degrees Gantry Angle: . . . . . Rotation Arc: . . . . x x 3  $\times \times \times$ Comp Filter Used: . . NO COMPENSATOR NO BOLUS USEI NO BOLUS USED NO BOLUS USED Bolus Used: . . . . NO BOLUS USED

1739 TD

[Max Point Dose = 7472]
Page# 1 of 2 Plan Info (Total ICRU Dose: 7296 [Sampled Dose Value: 7300])

1739 TD

1/14/2005





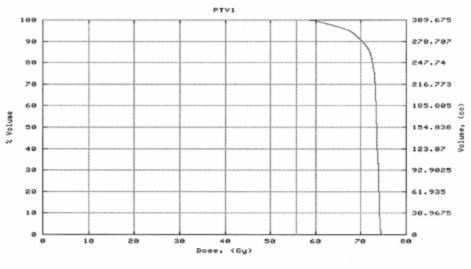
Remote Review Tool - Case: 0126c0009

Page 1 of 1 Remote Review Tool

#### **Image-guided Therapy Center**

PROTOCOL: 0126 CASE: 0009

STRUCTURE: PTV1



	% Vol >= D1	% Vol >= Dref	Max Dose	Min Dose	Mean Dose
Plan ID	(55.8 Gy)	(55.8 Gy)	(Gy)	(Gy)	(Gy)
totalhetero	100.0	100.0	74.7	56.9	72.7

Calculated: Fri Apr 16 14:08:26 2004 (/web/RTOP/patient/0126c0009/olddump.dat)
Printed Fri Jan 14 09:48:51 CST 2005

Close window





IMAGE.	CIUDED	THERAP	Y CENTER	HTCL
	CICILIZED			

				_											
Protoco	H0022 I	Dose-V	olume A	nal	ysis Q	A Revi	ew fo	r:							
Patient I	Name:	0013							Phy	sician:					_
Institutio	on:							QA C							_
А. ТА	RGET VO	OLUM	EANALY	SIS	i										_
Targ. Vol.	Volume (cc)	%V	ol ≥ Rx Dose	$\overline{}$	%Vol > 1 Rx Do							Max. Min Dose Dose Gy Gy		Score	
PTV66	42	100	366.0		7.3	72.6	100	)	61.4		><<	75	62.	2 70.3	1
PTV54	492	95.3	3 34.0		38	39.4	100		47.0	o	72.6	74.4	29.	4 59	1
	ing is: 1 - No Variation; 2 - Minor Variation; 3 - Major Variation. [The volume of PTV66 MUST be subtracted out of the PTV54 DVH]  DOSIMETRIC SCORE.														
Score	PTV66 Dose Coverage PTV54 Dose Coverage														
1	95% of PTV	/66	99% of 60.0 Gy		6 ≥		f PTV66	≤	95% ≥ 54	of PTV5	14	99% of PT 50.2 Gy	V54 ≥	80% of PT\ ≤ 59.4 Gy	V54
2	≥ 66 Gy 90% of PT	V66 ≥ 60	66≥		f PTV66	<b>≤</b>		of PTV5	54 ≥ 54	99% of PT	V54≥	80% of PT	V54 ≤		
3	<90% of PT	/66≥	72.6 G	of PTV6	65	Gy <905	% of PTV	/54 ≥ 54	47.0 Gy <99% of P	TV54≥	72.6 Gy < 80% of P	TV54 ≤			
ر ا	Gy		60.0 Gy			72.6 G	iy		Gy			47.0 Gy		72.6 Gy	
C. NO	DRMAL S	TRUC	TURE AN	AL	YSIS										
	rget Volum		Volume (			% Vol.	Done	Max	. Dose	(Gy)	Mean l	Oose (Gy)	Const	raint(s) Met	Score
Parotid	Parotid Lt 40.1 26.									58		22.4	- 0	( DN	+
Parotid	arotid Rt 37.3 9			93	230.	0 Gy			71.2		50.2	ים	r DN	1	
Parotid	l Total		77	.3	72	220.	0 Gy			71.2		36	ים	N D	
Mandil	ble		62	.3	1.1	770.	70.0 Gy			73		35.1	1	Y DN	\ /
Larynx	τ			3	٥	30.0 Gy			43.2			23			-
Brain S	Stem			29	٥	354.	0 Gy		50			7.1			- X
Spinal	Cord			.1	٥		0 Gy		40			17			-//
Non-Ti	arget Tissu	ue	117	74	1	i58.	9 Gy			73		12	'		/
													Compo	site Scor	e  1
Score							P	arotic	Spa	ring					
1	Mean de	se to cith	or gland < 2	6 Gy	or	50	% of cit				or	20 cc c	of combined	glands < 20 C	iy .
2										nd ≤ 30 C > 30 Gy					
3				_			60%	of cithe	r gland	> 30 Gy					
Composite	score is max	cimum of	coverage and	d parc	otid sparin	g scores.									
Reviewed	i by: Jo	uarles							Date (	of Revie	w: 10	29-04		F	lev. 20Mar02
	- 10														





## RTOG Headquarters Report

## RTOG Protocols supported by the ATC (as of April 1, 2005)

- 12 Studies (7 Active / 5 closed, data analysis continues)
  - <u>RTOG 94-06</u>: Phase I/II Dose Escalation Study Using 3D Conformal Radiation
     Therapy for Adenocarcinoma of the **Prostate** (closed, data analysis continues)
    - 54 institutions credentialed; 1084 patients registered to study
  - <u>RTOG 93-11</u>: Phase I/II Dose Escalation Study Using 3D Conformal Radiation
     Therapy in Patients with **Inoperable NSCLC** (closed, data analysis continues)
    - 27 institutions credentialed; 180 patients registered to study
  - <u>RTOG 98-03</u>: Phase I/II Radiation Dose Escalation Study Applying Conformal Radiation Therapy in Supratentorial **Glioblastoma Multiforme** (closed, data analysis continues)
    - 46 institutions credentialed; 210 patients registered to study





#### RTOG Protocols supported by the ATC (as of April 1, 2005) (cont.)

- <u>RTOG 0319</u>: Phase I/II Study to Evaluate 3DCRT Irradiation Confined to Region of the Lumpectomy Cavity for Stage I/IIA **Breast Carcinoma** (study closed, data analysis continues)
  - 31 institutions credentialed; 58 patients registered to study; 54 cases reviewed via RRT.
- <u>RTOG 0022</u>: Phase I/II Study of Conformal And Intensity Modulated Irradiation for **Oropharyngeal Cancer** (study closed, data analysis continues)
  - 31 institutions credentialed; 69 patients registered to study





#### RTOG Protocols supported by the ATC (as of April 1, 2005) (cont.)

- <u>RTOG 0117</u>: Phase I/II Dose Intensification Study using 3DCRT and Concurrent Chemotherapy for Patients with Inoperable **NSCLC**
  - 41 institutions credentialed; 23 patients registered to study; Target Accrual 73
- <u>RTOG 0126</u>: Phase III Randomize Study of High Dose 3DCRT/IMRT versus Standard Dose 3DCRT/IMRT in Patients treated for Localized **Prostate Cancer** (9/18/03 IMRT allowed)
  - 117 institutions credentialed; 523 patients registered to study; 125 cases reviewed via RRT; Target Accrual 1520
- <u>RTOG 0225</u>: Phase I/II Study of Conformal And Intensity Modulated Irradiation for Nasopharyngeal Cancer
  - 32 institutions credentialed; 45 patients registered to study; Target Accrual 64





## RTOG Protocols supported by the ATC (as of April 1, 2005) (cont.)

- RTOG 0232: Phase III Study Combined XRT & Brachytherapy vs.
   Brachytherapy alone for **Prostate Cancer**.
  - 52 institutions credentialed; 105 patients registered to study; Target Accrual 1520
- <u>RTOG 0236</u>: Phase II Study of Extracranial Stereotactic Radioablation in Treatment of Patients with Medically Inoperable Stage **NSCLC**
  - 4 institutions credentialed; 7 patients registered to study; Target Accrual 52
- <u>RTOG 0321</u>: Phase I/II Prostate: HDR Brachytherapy and XRT for **Prostate** Cancer.
  - 4 institutions credentialed; 7 patients registered to study; Target Accrual 110
- <u>RTOG 0413/NSABP B-39</u>: Phase III Study of Whole Breast RT versus Partial Breast Irradiation for **Breast Cancer**.
  - 5 institutions credentialed; Target Accrual = 3000.



## Pending RTOG Protocols -- ATC Resources Requested: N=8

- RTOG 0515(0238): A Phase I/II Study of GTV Definition with PET Fusion for NSCLC.
- <u>RTOG 0438(0245)</u>: Phase I Study of Stereotactic RT for Hepatic Cancer (Mets or Primary CA).
- <u>RTOG 0415</u>: Phase III Randomized Study of Hypofractionated
   3DCRT/IMRT vs. Standard 3DCRT/IMRT for <u>Prostate Cancer</u>.
- <u>RTOG 0418</u>: Phase II Study of IMRT + chemo for selected GYN (cervix or endometrial) cancer.
- RTOG 0529: Phase II Study of IMRT + chemo for Anal Cancer.





#### Pending RTOG Protocols (ATC Resources Requested: (cont.)

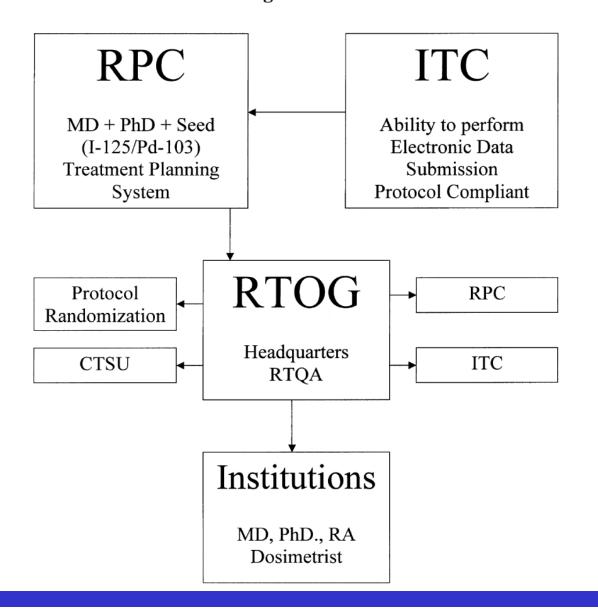
- <u>RTOG 0421</u>: Phase III Head & Neck: Re-irradiation + chemo versus Chemo alone for Recurrent Head and Neck Cancer (\*?certification only).
- <u>RTOG 0436</u>: Phase III Esophagus: Chemoradiation with or without Cetuximab. (\*?certification only)
- RTOG 0522: Phase III Advanced Unresectable Head & Neck Cancer: Chemoradiation with or without Cetuximab.
   (\*?certification only).





#### **RTOG 0232**

## **Prostate – Brachytherapy Credentialing Process Notification**









#### Radiation Therapy Oncology Group

American College of Radiology 1101 Market Street, 14th Floor Philadelphia, PA 19107 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Radiation Oncologist, M.D. Institution – CTSU Address City, State, Zip Code

Dear Dr.:

The Credentialing process by the Radiological Physics Center (RPC) for prostate brachytherapy and Electronic Data Submission to the Image-Guided Therapy Center (ITC) for RTOG-0232 – A Phase III Study Comparing Combined External Beam Radiation and Transperineal Interstitial Permanent Brachytherapy with Brachytherapy Alone for Selected Patients with Intermediate Risk Prostatic Carcinoma has been successfully met.

You are now approved to enter patients onto RTOG Prostate Implant Protocol 0232. A change in Radiation Oncologist, Physicist, treatment planning system, nuclide or seed model will require recredentialing by the RPC and/or ITC.

Sincerely,

Elizabeth A. Martin Director, R.T. Quality Assurance

cc: Physicist

Research Associate Dosimetrist RTOG Randomization

ITC RPC CTSU





# Credentialed Institutions RTOG – 0232 (52 Institutions Credentialed)

7718 1192 5922 1775 2102 3401 2215 2887 1518 1011 2501 1675 0137 2700 5803 2805 7501 0152 CTSU 2215 0184 6201 5301 2120 0629 9610 5702 3701 1021 5901 1744 2426 1914 0180 1918 7015 2704 5101 1016 0601 1451 0601 1640 9520 1788 0488 1512 2217 1086 8201 2619 5710 2344	Name	Source	Approved	Physician	Physicist	TX Planning Sys	Dry Run Sub. ITC	Dry Run Approval	
		RTOG Protocol P-0232							
	2650	Vanderbilt	I-plant	05/05/03	Ming Teng	Charles Coffey, Bob Aus	Rosses		
			logold,prostaseed,						
		Univ. of TX, San Antonio	pd200,pdgold,				Home Grown and		
7718		(Can. Ther. Res. Ctr)	best pd	05/16/03	Bradley Prestidge	William Bice	Variseed		
5922	1775	Mary Bird Perkins		07/18/03	Sheldon A. Johnson	Angela Stam	Varian Variseed		
		Washington University Medical Center		07/18/03	Jeff Michalski	_	Varian Variseed		
3401		Roswell Park Cancer Institute		08/06/03	Michael Kuettel	Matthew Podgorsak	Varian Variseed		
	2687	Wake Forest University Baptist Med. Ctr.		09/04/03	W. Robert Lee	Allan deGuzman	Varian Variseed		
1518		Akron City Hospital		09/29/03	Michael Seider	Stanley Phillips	Varian Variseed		
2501	1675	LDS Hospital		10/27/03	R. J. Lee, M.D.	David Matthes			
0137		Washoe Medical Center		11/04/03	Lawrence Dardick, M.D.	Richard Erickson, M.S.	Varian Variseed		
5803	2805	South Suburban Oncology Center		11/14/03	H. Joseph Barthold, M.D.	Sheri Weintraub, M.S.	Varian Variseed		
7501		Cross Cancer Institute		11/14/03	John Pedersen, M.D	Ron Sloboda, Ph.D.	Varian Variseed		
,					Joseph Cardinale, M.D.				
		Hospital of St. Raphael		11/18/03	Francis Cardinale, M.D.	Per Halvorsen, M.S.	Varian Variseed		
CTSU		Memorial Medical Center		12/05/03	Thomas Shanahan, M.D.	Randy Maxey, M.S.	Varian Variseed		
					Juanita Crook, M.D.				
2215		Princess Margaret Hospital		12/31/03	Michael McLean, M.D.	Ivan Yeung	Varian Variseed		
					Thomas Pisansky, M.D.	Robert W. Kline, Ph.D.			
					Brian J. Davis, M.D.	Luke McLemore, M.S.			
0184		Mayo Clinic		01/14/04	Derek L. Shickell, M.D.	C. Robert Blackwell,	Varian Variseed		
					Seth Rosenthal, MD				
					David linstadt, MD				
6201		Radiological Associates of Sacramento		01/21/04	Mark Leibenhaut, MD	Miriam Lambert, Ph.D.	Varian Variseed		
							Amersham		
5301	2120	Queen's Medical Center in Honolulu		02/02/04	John L. Lederer, M.D.	Edwin Price, Ph.D.	model 6711		
						Jadwiga B. Wojicicka,			
0629		York Cancer Center, Wellspan		02/11/04	Amit Shah, M.D.	Ph.D.	Varian Variseed		
9610		McKay Dee Hospital Center		02/12/04	Gary Whipple, M.D.	Mark Amfield, Ph.D.	Varian Variseed		
					Pradip Amin, M.D.				
5702		University of Maryland Medical Systems		02/16/04	William Regine, M.D.	Mehrdad Sarfaraz, Ph.D.	Variseed		
3701		Allegheny General Hospital			Russell Fuhrer, M.D.	Mark Johnson, M.S.	Varian Variseed		
5901	1744	Univ of TX-MD Anderson Cancer Center		03/31/04	Deborah Kuban, M.D.	Ann Lawyer, M.S.	Varian Variseed		
						Ram Virudachalam,			
2426	1914	Mount Diablo Medical Center		03/31/04	Daniel Chinn, M.D.	Ph.D.	Varian Variseed		1
		Mt. Sinal Comprehensive Can. Ctr.		04/14/04	Leonard Toonkel, M.D.	Francis Chang, Ph.D.	Varian Variseed		
		Waukesha Memorial Hospital		05/07/04	Wingate Clapper, M.D.	Eric Hendee, M.S.	Varian Variseed		
5101	1016	Albert Einstein Medical Center		05/07/04	Kenneth Zeitzer, M.D.	Feng Zhou, M.S.	Varian Variseed		
0601	1451	Frankford Hospital		05/07/04	Eric Gressen, M.D.	Jinyu Xue, Ph.D.	Varian Variseed		
				-	Adam Dicker, M.D.				
0601	1640	Thomas Jefferson University Hospital		05/07/04	Richard Valicenti, M.D.	Hayeon Kim, M.S.	Varian Variseed		
					Michael Hagan, M.D.				
		McGuire Veterans Admin. Med. Ctr.		05/10/04	Anthony Addesa, M.D.	Nirmal Sakthi	Varian Variseed		
0488	1512	H. Lee Moffitt Cancer Center		05/28/04	Randy Heysek, M.D.	Amarjit S. Saini, M.S.	Varian Variseed		
		Baptist Medical Center			Douglas Johnson, M.D.	Norman Brown, M.S.	Varian Variseed		
		University of Utah Hospital & Clinics		05/28/04	Dennis C. Shrieve, M.D.	Jim Rankin	Varian Variseed		-
		St. Agnes Cancer Center		06/01/04	Richard Hudes, M.D.	Timothy Holmes, Ph.D.	Varian Variseed		
1524	1104	Beth Isreal Medical Center		06/29/04	Daniel Shasha, M.D.	Lin Wang, M.S.	Varian Variseed		
2417	1166	California Cancer Center			Douglas Wong, M.D.	Georg Weidlich, Ph.D.	Varian Variseed		
0526	2597	University of Kentucky			William St.Clair, M.D.	Ali Meigooni, Ph.D.	Varian Variseed		
7001	1460	Medical College of Wisconsin		08/06/04	Colleen Lawton, M.D.	Paul Jursinic, Ph.D.	Varian Variseed		
		Community Memorial Hospital		08/11/04	Colleen Lawton, M.D.	Paul Jursinic, Ph.D.	Varian Variseed		
CTSU		Capital Health System - Mercer Campus			Daniel K. Fram, M.D.	Gregory Desobry, Ph.D.	Varian Variseed		





# Approved Institutions RTOG – 0022 & 0225 (Pharynx CA) 31 Sites Credentialed; 67 Sites in process

	T		ITC Dry	Digital Phantom				RPC				T	PERCENTE
Institution	NCI	RTOG	Run Approval	Data Submission to ITC	ITC Acceptable	DTE -	Phantom Irradiation	Phantom	RPC	Status	Barrets	RPC	Overall
Akron City Hospital	OH055		01/07/2005			1011	03/04/2004	Approval 03/29/2004	Acceptable	Active	Repeats	Acceptable	Approva
Albert Einstein Medical Center	PA094		0170772000	0110772000	100	1016				Active	-		Yes
Albuquerque Regional Medical Center	1 10004	0101				1016	00/01/2004	00/10/2004	105	Active			
Northeast Heights Cancer Center													
Radiation Oncology Associates of Albuquerque	NM001	0500	11/10/2004	11/01/2004	Yes	0400	04/40/0004	05400000	W				
Alta Bates Comprehensive Cancer Center	CA164	9500		11/01/2004	105	2406 1025	04/12/2004		Yes	Active	N/A	N/A	Yes
Baptist Medical Center	CATION	9600					004000004	01/07/2005	Yes	Active			
Baptist Hospital of Miami	FL078	8903				1066			Yes				
Baylor College of Medicine	FE076	7011				1088		01/07/2005	Yes	Active			
Beth Isreal Deaconess Medical Center	MA038	9641					05/17/2004		Yes	Resign-4/1/95			
Brigham & Women's Hospital/Dana Farber Cancer Insitute	MA037	9626				1103		10/20/2004	Yes	Active			
California Cancer Center	MAUG	9020				1722			Yes	Active			
Cancer Center at Saint Agnes	CA112	2431				1166			No				
Cancer Therapy and Research Center		7718				1182			Yes	Active			
Central Wisconsin Cancer Program (St. Agnes_Wisconsin)	TX059					1193		08/31/2004	Yes	Active			
	W1060	7013				1231	02/04/2003		No	Resign-12/31/96			
Charleston Radiation Therapy Consultants Christiana Care Health System						1238	05/13/2004		Yes				
	DE002	8918				1256	06/28/2004	08/13/2004	Yes	Active			
Christus St. Joseph Hospital						2404	01/13/2005		Yes				
Cleveland Clinic Foundation	OH027	6001				1269	08/10/2004	09/22/2004	Yes	Active			
Community Medical Center	NJ070		07/29/2004	07/29/2004	Yes	1293		02/13/2004	Yes	Active	N/A	N/A	Yes
Cross Cancer Institute	11104		12/21/2001	12/21/2001	Yes	1313		1st 10	Yes	Active	N/A	N/A	Yes
Dartmouth-Hitchcock Medical Center	NH012		01/07/2005	01/07/2005	Yes	1325	08/31/2004	10/20/2004	Yes	Active			Yes
Emory Clinic	GA005	1523				1401	06/04/2004	02/12/2004	Yes	Active			
Fairview University Medical Center	MN022	1312				2603		05/27/2004	Yes	Active			
Falck Cancer Center	NY170	0527				1040	08/31/2004	10/20/2004	Yes	Resign - 4/15/97			
Flower Memorial Hospital		7690				1440	11/02/2002	12/03/2003	Yes	Active			
Fox Chase Cancer Center	PA086	2212				1449	12/02/2002	11/20/2003	No	Active	Repeat - 9/4/03	Yes	
Georgetown University Medical Center	DC005	5487				1471	03/28/2003	06/19/2003	No	Resign-2/21/00			
Geisinger Medical Center	PA052	0181				1463	08/31/2004	09/24/2004	Yes	Active			
Good Samaritan, Portland OR			02/20/2003	05/07/2003	Yes	1483	04/30/2003	06/06/2003	Yes	Resign-10/1/95	Repeat - 7/25/03	Yes	Yes
H. Lee Moffitt Cancer Center	FL079		11/18/2003	11/18/2003	Yes	1512	01/16/2004	03/02/2004	Yes	Active	N/A	N/A	Yes
Holmes Regional Medical Center	FL021	2236				1557	07/17/2002	09/18/2003	No	Resign-1/21/03	Repeat - 7/7/03	Yes	
Hughes Cancer Center - Pocono Medical Center						2084	11/19/2005	01/04/2005	Yes				
Intercommunity Cancer Center, Cincinnati. OH						1602	09/19/2003	09/19/2003	Yes	Not a Member			
lowa Methodist Medical Center	IA004	0200				1626	04/24/2003	06/16/2003	No	Resign-4/15/97	Repeat - 2/18/05	Yes	
John's Hopkins	MD017	5701	04/03/2003	03/31/2003	Yes	1652	01/20/2003	06/06/2003	Yes	Active	N/A	N/A	Yes
Johnson City Medical Center	TN011	5804				1653	02/27/2004	03/18/2004	Yes	Active	1471		
Kaiser Permanente-Radiation Oncology Center						2974	01/13/2005	02/09/2005	Yes				
Kansas City Cancer Centers-Southwest (CCOP)	MO058	0126	01/13/2004	01/13/2004	Yes	1654	02/13/2004	03/17/2004	Yes	Active	N/A	N/A	Yes
Kansas City Hospital (North Kansas City Hospital)	MO058	0126	07/29/2004	07/29/2004	Yes	1978	07/28/2004	08/31/2004	Yes	Active	N/A	N/A	Yes
Lankenau Hospital	PA163	0258	05/26/2004	05/26/2004	Yes	1148				Active		1471	200
LDS Hospital	UT004	2501				1675	12/12/2003	01/15/2004	Yes	Active			
Lutheran General Hospital	IL010	0722				1732	12/08/2004	12/08/2004	Yes				
M.D. Anderson Cancer Center	TX035	5901	11/14/2001	11/14/2001	Yes	1744	04/14/2001	1st 10	Yes	Active	N/A	N/A	Yes
MD Anderson Brazosport								08/23/2004	Yes	7.00.0		1471	
Mary Bird Perkins Cancer Center	LA002	8802	06/28/2004	06/28/2004	Yes	1775	09/23/2004	08/31/2004	Yes	Active	N/A	N/A	Yes
Massachusetts General Hospital	MA034	5801				1783	05/06/2003	1st 10	Yes	Active	1071	1471	
Mayo Clinic, Rochester. MN	MN026	0184	10/18/2004	10/18/2004	Yes	1785	05/20/2003	06/23/2003	Yes	Active	N/A	N/A	Yes
McGill University	11152	1201	03/25/2004	03/25/2004	Yes	1903	12/08/2003	02/04/2004	Yes	Active	N/A	N/A	Yes
McKay-Dee Hospital Center	UT007		11/03/2004	11/03/2004	Yes	2807	03/16/2004	04/13/2004	Yes	Active	N/A	N/A	Yes
McLaren Regional Cancer Center	MI060	2209				1790	06/04/2004	06/04/2004	Yes	Active	1671	TUN	100
Medical College of Wisconsin	WI013		02/20/2002	02/20/2002	Yes	1460	03/09/2001	1st 10	Yes	Active	N/A	N/A	Yes
Memorial Health University Medical Center				3222302		1810	3300E001	101.10	No	PICUTO	IVA	TUA	105
Memorial Sloan-Kettering Cancer Center	NY016	2301	01/06/2004	01/06/2004	Yes	1823	10/31/2003	12/04/2003	Yes	Active	N/A	N/A	Van
Monmouth Medical Center	NJ068	2242		0110012004		1897	10/04/2004	12/01/2004	Yes	Active	TWA	PUA	Yes
Naval Medical Center Portsmouth	VA024	2245				1941	06/16/2003	07/18/2003	Yes	Active			
Northwest Community Hospital	IL001	7705				1341	08/20/2003	12/02/2003	Yes	Active			
Northwestern Memorial Hospital	IL036	2116				2163	00/20/2003	07/12/2004	Yes				
TO A INTERNATIONAL PROPERTY.	10000	2:110				2163		07/12/2004	Y 0 5	Active			24 2 7 1 2 2



## RTOG/ATC Challenges

- Faster Protocol Development process.
- Incentivization for RTOG members to become certified.
- Increased accrual to selected studies, e.g. 0232.
- Enormous amount of data has been collected needs to be analyzed!



## ATC Meeting Schedule

- Monthly teleconferences are held on the first Wednesday of each month to keep all ATC participants up to date on ongoing activities. Next call on May 4, 2005 at 2:00 CST.
- Bi-weekly teleconferences are held on Friday for RTOG/ITC/RPC Specific issues.
- ATC meeting at the RTOG Semi-Annual Meeting in Philadelphia, PA, Loews Philadelphia Hotel, June 23, 2005 at 8:00am 5:00pm.





## R. T. Quality Assurance Staff



Back Row L/R: Lorraine Quarles; Denise Manfredi; Tammy McGlade;

**Betty Martin; Joanne Hunter** 

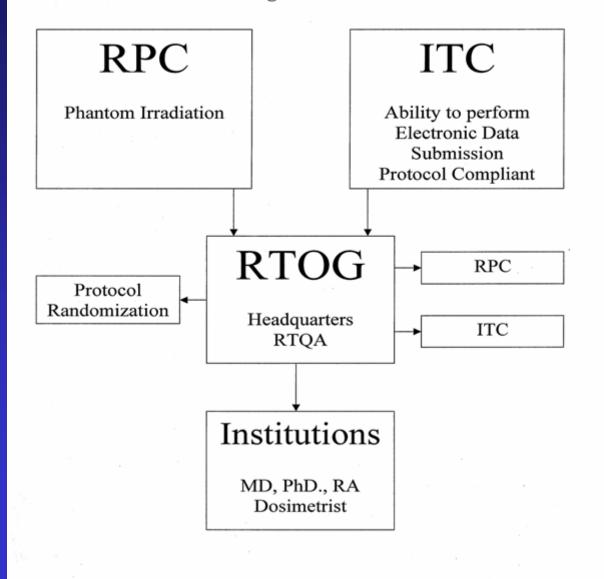
Front Row L/R: Darlene Herd; Julie McIlvaine







#### RTOG 0225 IMRT H&N – Nasopharyngeal Credentialing Process Notification









#### Radiation Therapy Oncology Group

American College of Radiology 1101 Market Street, 14th Floor Philadelphia, PA 19107 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Institution

Dear Dr.:

The IMRT Head and Neck Phantom irradiation component of the credentialing process reviewed by the Radiological Physics Center (RPC) and the testing for the dry run case through the Image-Guided Therapy Center (ITC) for RTOG 0022 – Phase I/II Study of Conformal and Intensity Modulated Irradiation for Oropharyngeal Cancer and RTOG 0225 – Phase II Study of Intensity Modulated Radiation Therapy (IMRT) +/- Chemotherapy for Nasopharyngeal Cancer has been successfully met.

You are now approved to enter patients onto RTOG Protocol 0022 and RTOG 0225.

Sincerely,

Elizabeth A. Martin Director, R.T. Quality Assurance





# Approved Institutions RTOG – 0022 & 0225 (cont.) 31 Institutions Credentialed 67 Institutions in process

Institution	NCI	RTOG	Run Approval	Digital Phantom Data Submission to ITC	rrc Acceptable	RTF #	Phantom Irradiation	RPC Phantom Approval	RPC Acceptable	Statue	Repeats	RPC Acceptable	Overall Approval
Palmetto Health Richland Hospital		Bright, or	Approvai	10110	мссершоге	1626		2/11/2005	Yes		rapean		100000000000000000000000000000000000000
	11030	2215				2100	03/12/2004		Yes	Active			
Princess Maraget Hospital Queen's Medical Center, Honolulu, Hawaii	HI004	5301				2120	02/25/2003	06/23/2003	Yes	Active			
Radiation Oncology Centers of Las Vegas	NV012		10/13/2004	10/13/2004	Yes	2138	02/24/2004	03/17/2004	Yes	Active	N/A	N/A	Yes
	CA269		05/22/2003	01/10/2003		2503	10/16/2003	12/05/2003	Yes	Active	N/A	N/A	Yes
Radiological Associates Sacramento (Sutter)	SD006			01/10/2003	100	2163	06/06/2004	07/12/2004	Yes	Active	1671		0.75 (079
Rapid City Regional Hospital	GA069					1621	07/01/2004	08/23/2004	Yes	Active			
Regional Radiology Oncology Center, Rome, GA	NJ053	0633				2913	03/06/2004	04/07/2004	Yes	Active			
Robert Wood Johnson University Hospital	NJUSS					2212	06/04/2004	06/04/2004	Yes	Active			
Roper Hospital	100000	4512	04/13/2004	04/13/2004	Yes	2215		11/11/2003	Yes	Active	N/A	N/A	Yes
Roswell Park Cancer Institute	NY158			12/10/2001	Yes	2260	11/09/2001	1st 10	Yes	Active	N/A	N/A	Yes
Saskatoon Cancer Center	11120		12/10/2001	12/10/2/001	100	2271	11/01/2003		Yes	Active	1455	1407	200000000
Sentara Norfolk General Hospital	VA052	5485				2433		07/18/2003	Yes	Active			-0.4022/102
St Luke's Bethlehem, PA	PA054	1324		0.014.0.000.0	Yes	2433	06/18/2003	07/18/2003	105	ACEYE			-312750
St. Vincent Hospital	_	7010	00/10/2005	03/10/2004	Yes	2560	11/24/2003	11/24/2003	Yes				
Swedish Cancer Institute								11/24/2003	Yes	Active	N/A	N/A	Yes
Thomas Jefferson University	PA121		11/14/2001	11/14/2001	Yes	1640		08/23/2004	Yes	Resign - 9/5/97	NUM.	nen.	-
Thompson Cancer Survival Center	TN038	2111				2530			Yes	Active	N/A	N/A	Yes
Tom Baker Cancer Centre	11134		06/23/2003	06/23/2003	Yes	2535					N/A	new.	-0.00
University Hospital of Cincinneti	OH070					2589		03/03/2004	Yes	Active Active	N/A	N/A	Yes
University of Alabama at Birmingham	AL002		06/30/2003	06/30/2003		2582					N/A	N/A	Yes
University of California, Davis; Sacramento, CA 95817	CA189		07/29/2004	07/29/2004		2584		12/09/2003	Yes	Active	N/A	N/A	Yes
University of California San Francisco	GA136		04/10/2002	04/10/2002	Yes	2564	02/27/2002	1st 10	Yes	Active	N/A	N/A	Yes
University of Florida, Gainesville	FL015	3228				2592		1st 10	Yes	Active			-80000000
University of Elnois Medical Center	IL040	9556				2594	08/31/2004		Yes	Resign - 1/17/02			
University of Maryland	MD015					2599		01/07/2006	Yes	Active	N/A	N/A	Yes
University of Michigan Medical Center	MI014		06/16/2003	06/16/2003	Yes	2602			Yes	Active	N/A	N/A	Yes
University of North Carolina Hospitals	NC007					2608		11/08/2004	Yes	Resign - 10/1/04			-2000
University of Pennsylvania	PA075					2610			Yes	Resign-12/2/03			-11:076920
University of Pittsburgh at Shadyside	PA015					2277				Unspecified			-86600000
University of Rochester	NY167	0501				2613			Yes	Active		5115	-
University of Texas Medical Branch, Galveston	TXD45		04/10/2002	04/10/2002	Yes	2618		1st 10	Yes	Active	N/A	N/A	Yes
University of Utah	UT003					2619			Yes	Active		2777	
University of Wisconsin	W1020	0801	06/23/2003	06/23/2003	Yes	2622			Yes	Active	N/A	N/A	Yes
UT Southwestern Medical Center	TX011	5915				2569				Active			23320339
Virginia Mason Medical Center	WA054		03/09/2006	03/09/2005	Yes	2681	04/30/2004			Active	Repeat - 7/24/03	Yes	Yes
Wake Forest University School of Medicine	NC002					2687	11/14/2003	02/10/2004		Active			73275
Washington University	MO011		03/02/2004	03/02/2004	Yes	1075		1st 10	Yes	Active	N/A	N/A	Yes
Waukesha Memorial Hospital	W1051	7015				2704	06/24/2002	06/23/2003		Active			1000000
Western Pennsylvania Hospital	PA018	7008				2729		05/17/2004		Active			
Wilkes-Barre General Hospital	PA060					2741	10/22/2002	02/06/2004		Active	Repeat - 7/13/03	Yes	
William Beaumont Hospital, Royal Oak, MI	MI005	7720	02/27/2000	05/12/2000	Yes	2744		01/13/2004		Active	N/A	N/A	Yes
York Cancer Center	PA047	0629				1034	04/04/2004	06/06/2004	Yes	Active			3677356







#### Radiation Therapy Oncology Group

American College of Radiology 1101 Market Street, 14<sup>th</sup> Floor Philadelphia, PA 19107 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Institution

Dear Dr.:

Since your institution has been credentialed for the IMRT Head and Neck protocols (RTOG 0022 & RTOG 0225) you will be automatically credentialed to participate in the Prostate protocol using IMRT (RTOG 0126 – Phase III Randomized Study of High Dose 3D-CRT/IMRT Versus Standard Dose 3D-CRT/IMRT in Patients Treated for Localized Prostate Cancer). You will not be required to do additional credentialing for the use of IMRT on RTOG 0126.

You are now approved to enter patients onto RTOG Protocol 0126.

Sincerely,

Elizabeth Martin Director, R.T. Quality Assurance

ce: Physicist
Research Associate
RTOG Randomization
ITC
RPC







#### Radiation Therapy Oncology Group

American College of Radiology 1101 Market Street, 14th Floor Philadelphia, PA 19107 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Institution

Dear Dr.:

The Credentialing process by the Radiological Physics Center (RPC) for irradiating the Head and Neck Phantom using IMRT has been successfully met. The Electronic Data Submission to the Image-Guided Therapy Center (ITC) for RTOG 0126 – Phase III Randomized Study of High Dose 3D-CRT/IMRT Versus Standard Dose 3D-CRT/IMRT in Patients Treated for Localized Prostate Cancer has also been successfully met.

You are now approved to enter patients onto RTOG Protocol 0126.

You are not approved to enter patients onto Head and Neck Protocols using IMRT (RTOG 0022 and RTOG 0225). If in the future you wish to enter patients onto Head and Neck Protocols using IMRT, you will be required to complete the Dry Run test for the Head and Neck IMRT study.

Sincerely,

Elizabeth Martin Director, R.T. Quality Assurance

c: Physicist

Research Associate RTOG Randomization

ITC RPC







#### Radiation Therapy Oncology Group

American College of Radiology 1818 Market Street, Suite 1600 Philadelphia, PA 19103-3604 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Principal Investigator
Institution – RTOG # , NCI # , RTF #
Address
City, State, Zip

Dear Dr.:

The Credentialing process by the Radiological Physics Center (RPC) for irradiating the Pelvic Phantom using IMRT has been successfully met. The Electronic Data Submission to the Image-Guided Therapy Center (ITC) for RTOG 0126 – Phase III Randomized Study of High Dose 3D-CRT/IMRT Versus Standard Dose 3D-CRT/IMRT in Patients Treated for Localized Prostate Cancer has also been successfully met.

You are now approved to enter patients onto RTOG Protocol 0126.

You are not approved to enter patients onto Head and Neck Protocols using IMRT (RTOG 0022 and RTOG 0225). If in the future you wish to enter patients onto Head and Neck Protocols using IMRT, you will be required to irradiate the Head and Neck Phantom using IMRT and complete the Dry Run test for the Head and Neck IMRT study.

Sincerely,

Elizabeth Martin Director, R.T. Quality Assurance

ce: Physicist
Research Associate
RTOG Randomization
ITC
RPC







#### Radiation Therapy Oncology Group

American College of Radiology 1101 Market Street, 14th Floor Philadelphia, PA 19107 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Institution

Dear Dr. :

The Credentialing process including the Electronic Data Submission to the Image-Guided Therapy Center (ITC) for RTOG 0126 – Phase III Randomized Study of High Dose 3D-CRT/IMRT Versus Standard Dose 3D-CRT/IMRT in Patients Treated for Localized Prostate Cancer has been successfully met.

You are now approved to enter patients onto RTOG Protocol 0126 for 3D-CRT only.

Sincerely,

Elizabeth Martin Director, R.T. Quality Assurance

c: Physicist

Dosimitrist Research Associate RTOG Randomization

ITC RPC





#### **RTOG 0236**

# Phase II Trial of Stereotactic Body Radiation Therapy (SBRT) in the Treatment of Patients with Medically Inoperable Stage I/II Non-Small Cell Lung Cancer

## **SCHEMA**

R E G I S T E R

Stereotactic Body Radiation Therapy (SBRT), 20 Gy per fraction for 3 fractions over 1½-2 weeks, for a total of 60 Gy







#### Radiation Therapy Oncology Group

American College of Radiology 1818 Market Street, Suite 1600 Philadelphia, PA 19103-3604 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

, M.D.
Institution – RTOG # ; NCI # ; RTF 6
Department of Radiation Oncology
Address
City, State, Zip

Dear Dr.:

Your institution has successfully completed the Lung Phantom Irradiation Dosimetry Test, Facility Opestionnaire, Immobilization/Localization and Respiration Control Systems Test.

You can now enter patients on to RTOG Protocol 0236.

The Dry Run / Rapid Review will be reviewed on the actual case. The dosimetry will be reviewed and the study chair will determine if this and the drawn structures are protocol compliant and sufficient for the patient to go ahead with treatment. Since this test case (Dry Run / Rapid Review) is the first case entered from your institution, the scanning parameters, the structure outline, and the dosimetry will have to be according to protocol in order to pass the Dry Run / Rapid Review PRIOR TO DELIVERING ANY PROTOCOL TREATMENT. The plan will be reviewed centrally at the ITC, and suggestions regarding protocol compliance will be forwarded to your institution. The treatment plan for subsequent patients enrolled from your site will not be required to be centrally reviewed prior to treatment, but will be reviewed for protocol compliance at a later date.

However, the Immobilization/Localization and Respiration Control Systems Test must be repeated for the first 4 cases submitted from your institution and the results reviewed by James Galvin, D.Sc., Medical Physics Co-Chair. The data for the first patient entered must be reviewed and approved before you enter a second patient, and the results of the Immobilization/Localization and Respiration Control Systems Study for this patient must be approved prior to entering a third patient. At this point, any additional number of patients can be entered. You will have to send forward the results of the Immobilization/Localization and Respiration Control Systems Study for the third and fourth patients entered. Please refer to the attached information.

Sincerely,

Elizabeth A. Martin Director, R.T. Quality Assurance

> Physicist Research Associate James Galvin, D.Sc. RTOG Randomization ITC RPC





#### RTOG Protocol 0236

#### Immobilization/Localization and Respiration Control Systems Study

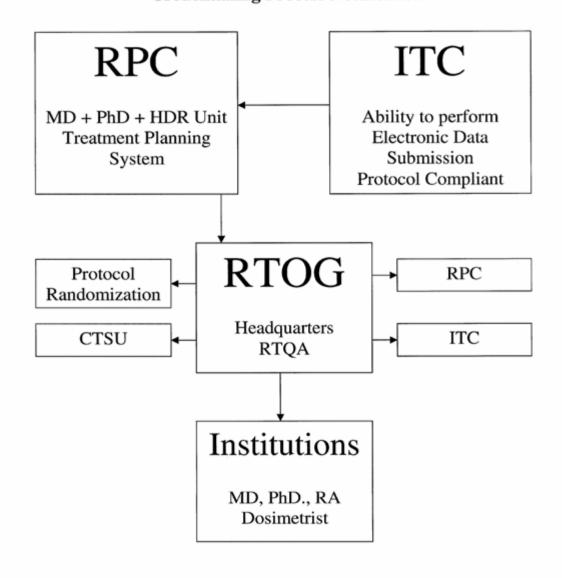
This study must be performed on a single patient, and approval received from RTOG Headquarters, before you attempt to enter your first patient on RTOG Protocol 0236. A similar study must be performed for the first patient entered on this protocol, and approval must be received from Headquarters prior to entering a second patient. This same procedure must be followed before entering a third patient. A fourth patient can be entered at the same time as the third, as well as, additional patients can also be entered at this time. However, the results of the Immobilization/Localization and Respiration Control Systems Study for the third and fourth patients entered on this protocol must be sent forward for review as quickly as possible. This information will be analyzed, but no further communication will be sent from RTOG Headquarters except in those situations where problems are detected. If problems are found, you could be asked to stop entering patients until the issue is resolved. In situations where no problems are found, the Immobilization/Localization and Respiration Control Systems Study will be discontinued after you have sent the data forward for the fourth patient you have entered on this protocol.





#### **RTOG 0321**

#### **Prostate - Brachytherapy** Credentialing Process Notification









#### Radiation Therapy Oncology Group

American College of Radiology 1818 Market Street, Suite 1600 Philadelphia, PA 19103-3604 (215) 574-3189 (800) 227-5463 Ext. 4189 (215) 928-0153 Fax

Date

Principal Investigator, M.D.
Institution – RTOG # ; NCI # ; RTF #
Department of Radiation Oncology
Address
City, State, Zip

Dear Dr.:

The Credentialing process by the Radiological Physics Center (RPC) for prostate brachytherapy and Electronic Data Submission to the Image-Guided Therapy Center (ITC) for RTOG 0321 – Phase II Trial of Combined High Dose Rate Brachytherapy and External Beam Radiotherapy for Adenocarcinoma of the Prostate has been successfully met.

You are now approved to enter patients onto RTOG Prostate Implant Protocol 0321. A change in Radiation Oncologist, Physicist, treatment planning system, HDR unit will require recredentialing by the RPC and/or ITC.

Sincerely,

Elizabeth A. Martin Director, R.T. Quality Assurance

ce: Physicist
Research Associate
RTOG Randomization
ITC
RPC
CTSU





#### **RTOG 0413**

## A Randomized Phase III Study of Conventional Whole Breast Irradiation (WBI) Versus Partial Breast Irradiation (PBI) for Women with Stage 0, I, or II Breast Cancer

#### Randomization

#### **GROUP 1\***

**Whole Breast Irradiation (WBI)** 

45-50 Gy in 25 (1.8-2.0 Gy) fractions to whole breast, followed by optional boost\*\* to ≥ 60 Gy

#### **GROUP 2\***

Partial Breast Irradiation (PBI)\*\*\*

34 Gy in 3.4 Gy fractions using multi-catheter interstitial brachytherapy

Oi

34 Gy in 3.4 Gy fractions using MammoSite® balloon catheter

or

38.5 Gy in 3.85 Gy fractions using 3D conformal external beam radiation

For all PBI techniques: RT given to index quadrant only, BID (with a fraction separation of 6 hours), in 5-10 days.







## Credentialed Institutions (cont.) RTOG – 0232 (52 Institutions Credentialed)

RTOG	RTF							Dry Run	Dry Run
Inst. #	#	Name	Source Appro		Physician	Physicist	TX Planning Sys	Sub. ITC	Approval
						Andrew Jones, Ph.D.			
						Carla Setto Scofield,			
0181	1463	Geisinger Medical Center		08/23/04	Omar Yumen, M.D.	M.S.	Varian Variseed		
7016	2450	St. Mary's Regional Cancer Center		09/01/04	Doug Rock, M.D.	Larry Pallas, M.S.	Varian Variseed		
						Jose Garcia-Cobian,			
1022	2636	Virtua Memorial Hospital of Burlington County		09/10/04	Lemuel Ariaratnam, M.D.	M.S.	Varian Variseed		
		Gibbs Cancer Center			Particia Griffin, M.D.	David Vassy, M.S.			
2132	2340	Spartanburg Regional Hospital		09/10/04	Drew Monitto, M.D.	Jim Turmel, M.S.	Varian Variseed		
CTSU	2229	Sacred Heart Medical Center		09/23/04	Gary VanHeuvelen, M.D.	Ray Luse, M.S.	Varian Variseed		
2501	1307	Cottonwood Hospital		10/07/04	R. Jeffrey Lee, M.D.	David Matthes	Varian Variseed		
	2265	Scottsdale Radiation Oncology							
2503	1042	Arrowhead Cancer Center		10/20/04	David Beyer, M.D.	Kevin Rogers, M.S.	Varian Variseed		
0503	2406	Radiation Oncology Associates of Albuquerque		10/28/04	Paul Anthony, M.D.	David Lake, M.S.	Varian Variseed		
					Michael Haake, M.D.				
0528	1210	Carolinas Medical Center		11/17/04	Brad McCall, M.D.	Doug Frank, M.S.	CMS XIO		
					Vidon Donovanik, M.D.	-			
8918	1256	Christiana Care Health Services		12/16/04	Adam Raben, M.D.	Larry Simpson, Ph.D.	Varian Variseed		
					Albert Yuen, M.D.				
2228	2168	Reading Hospital & Medical Center		12/22/04	Michael Haas, M.D.	Rene Smith, Ph.D.	Varian Variseed		
2401	2403	University of California San Francisco		12/22/04	Mack Roach, M.D.	Barby Pickett			
0501		University of Rochester			Ralph Brasacchio, M.D.	Haisong Liu, Ph.D.	Rtek Piper		
		South Nassau Communities Hospital			Louis Potters, M.D.	Joseph Presser, M.S.	Varian Variseed		

