

## **RTOG 1203**

Report Based on Data Through: 03/14/2019

## A Randomized Phase III Study Of Standard vs. IMRT Pelvic Radiation For Post-Operative Treatment Of **Endometrial And Cervical Cancer (TIME-C)**

a	TOTAL D	R	
S	XRT Dose		
Т	1. 45 Gy	A	Arm 1
1	2. 50.4 Gy	N	IMRT pelvic radiation
R	•	14	treatment
1	CI 4	D	
A	<u>Chemotherapy</u>	D	
A	1. No Chemotherapy	0	
T	2. 5 cycles of weekly	J	
1	•	M	
T	cisplatin at 40 mg/m <sup>2</sup>	171	Arm 2
1		I	
F	Digago Sita	1	4-field pelvic radiation
Г	<u>Disease Site</u>	Z	treatment
Y	<ol> <li>Endometrial</li> </ol>	L	
1	2. Cervix	E	
	=- <del></del>	L	

See Section 5.0 of the protocol for pre-registration requirements, Section 6.0 of the protocol for details of radiation therapy, and Section 7.0 of the protocol for details of drug therapy.

**Study Chairs:** Ann Klopp, M.D., Ph.D. (co-PI/Radiation Oncology)

Anamaria Yeung, M.D.

Shannon N. Westin, M.D., M.P.H.

Kent Gifford, Ph.D.

Andre Konski, M.D., M.B.A., M.A., F.A.C.R. (Cost Analysis)

Joanne Weidhaas, M.D., Ph.D.

Karen Gil, Ph.D.

Lari Wenzel, Ph.D.

(co-PI/Radiation Oncology) (Gynecological Oncology)

(Medical Physics)

(Translational Research)

(Quality of Life) (Quality of Life)

**Protocol Statisticians:** Stephanie Pugh, Ph.D.

Snehal Deshmukh, M.S.

Roseann Bonanni, C.T.R., C.C.R.P. **Research Associate:** 

Denise Manfredi, B.S., R.T. (T) **Dosimetrist:** 

**Activated:** 11/28/2012

**Closed:** 08/27/2015

**Status:** Follow-up, primary endpoint published

# • Study Description

This is a two-armed randomized phase III study designed to evaluate acute gastrointestinal toxicity with patient reported measure of toxicity, the Expanded Prostate Cancer Index Composite (EPIC) instrument. Patients, 18 years or older, must have pathologically proven diagnosis of endometrial or cervical cancer who require post-operative radiation or chemoradiation and Zubrod performance status 0-2. The primary endpoint for this study is to determine if IMRT reduces acute gastrointestinal toxicity in the 5<sup>th</sup> week i.e. after 23-25 fractions of pelvic radiation as measured with EPIC (bowel domain) as compared to conventional pelvic RT.

## Patient Accrual

The study was activated on November 28, 2012 and completed accrual on August 27, 2015 with 289 patients randomized (Table 1). Median time of follow-up for vital status is approximately 3 years.

#### Adverse Events

Adverse events (AEs) were graded with CTCAE version 4. As of March 14, 2019, there have been 39 patients (31.2%) with grade 3, 3 (2.4%) with grade 4, and 1 (0.8%) with grade 5 events reported on the IMRT arm compared to 32 patients (22.2%) with grade 3 events and 4 (2.8%) with grade 4 events on the 4-Field arm regardless of attribution to treatment (Table 2). Table 3 shows the distribution of patients by highest grade AE and by specific AE term without regard to attribution. This table only includes system organ classes and terms with at least one grade 3, 4, or 5 event. There has been one patient (0.8%) with a grade 4 respiratory failure, 1 (0.8%) with a grade 4 thromboembolic event, 1 (0.8%) with a grade 4 sepsis and Hyperkalemia, and 1 (0.8%) with a grade 4 neutrophil count decreased on the IMRT arm, all reported unrelated to treatment. There has been 1 patient (0.8%) with grade 5 hypotension on IMRT arm unrelated to treatment. One patient had both a grade 4 sepsis and grade 5 hypotension AE on IMRT arm. On the 4-Field arm, there has been 1 patient (0.7%) with a grade 4 intra-abdominal hemorrhage reported unrelated to treatment, 1 (0.7%) with a grade 4 hyperglycemia reported unlikely related to treatment, 1 (0.7%) with a grade 4 other reproductive system and breast disorders event reported probably related to treatment and 1 (0.7%) with a grade 4 dyspnea event reported unrelated to treatment (Table 3).

Table 1
RTOG 1203 Accrual/Eligibility - Data as of 03/14/2019

	IMRT Pelvic Radiation Treatment	4 Field Pelvic Radiation Treatment	Total
Randomized	137	152	289
Ineligible	7	3	10
Eligible	130	149	279

Eight patients received no study treatment and are not included in adverse event tables.

Table 2
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by System Organ Class - Data as of 03/14/2019
For All Reported Adverse Events without Regard to Attribution

	IMRT		Radiation (n=125)		tment	4 Field Pelvic Radiation Treatment (n=144)						
System Organ Class	n an	ıd (%) o	f Patien	ts by G	rade	n an	ıd (%) o	f Patien	ts by G	rade		
	1	2	3	4	5	1	2	3	4	5		
Overall Highest Grade	36	44	39	3	1	37	66	32	4	0		
	(28.8)	(35.2)	(31.2)	(2.4)	(0.8)	(25.7)	(45.8)	(22.2)	(2.8)	(0.0)		
Blood and lymphatic system												
disorders	16	6	5	0	0	12	4	3	0	0		
	(12.8)	(4.8)	(4.0)	(0.0)	(0.0)	(8.3)	(2.8)	(2.1)	(0.0)	(0.0)		
Cardiac disorders	8	0	1	0	0	4	0	0	0	0		
	(6.4)	(0.0)	(0.8)	(0.0)	(0.0)	(2.8)	(0.0)	(0.0)	(0.0)	(0.0)		
Ear and labyrinth disorders	8	2	1	0	0	14	2	0	0	0		
	(6.4)	(1.6)	(0.8)	(0.0)	(0.0)	(9.7)	(1.4)	(0.0)	(0.0)	(0.0)		
Eye disorders	8	1	0	0	0	3	3	0	0	0		
	(6.4)	(0.8)	(0.0)	(0.0)	(0.0)	(2.1)	(2.1)	(0.0)	(0.0)	(0.0)		
Gastrointestinal disorders	62	40	12	0	0	66	43	14	1	0		
	(49.6)	(32.0)	(9.6)	(0.0)	(0.0)	(45.8)	(29.9)	(9.7)	(0.7)	(0.0)		
General disorders and												
administration site conditions	73	25	2	0	0	76	25	3	0	0		
	(58.4)	(20.0)	(1.6)	(0.0)	(0.0)	(52.8)	(17.4)	(2.1)	(0.0)	(0.0)		
Hepatobiliary disorders	1	0	0	0	0	0	0	1	0	0		
	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Immune system disorders	1	0	1	0	0	0	2	0	0	0		
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)		
Infections and infestations	4	20	4	1	0	0	16	4	0	0		
	(3.2)	(16.0)	(3.2)	(0.8)	(0.0)	(0.0)	(11.1)	(2.8)	(0.0)	(0.0)		
Injury, poisoning and												
procedural complications	11	6	1	0	0	14	8	0	0	0		
	(8.8)	(4.8)	(0.8)	(0.0)	(0.0)	(9.7)	(5.6)	(0.0)	(0.0)	(0.0)		
Investigations	12	14	14	1	0	13	16	9	0	0		
	(9.6)	(11.2)	(11.2)	(0.8)	(0.0)	(9.0)	(11.1)	(6.3)	(0.0)	(0.0)		
Metabolism and nutrition												
disorders	22	12	8	1	0	28	9	4	1	0		
	(17.6)	(9.6)	(6.4)	(0.8)	(0.0)	(19.4)	(6.3)	(2.8)	(0.7)	(0.0)		
Musculoskeletal and connective												
tissue disorders	21	12	0	0	0	27	12	2	0	0		
	(16.8)	(9.6)	(0.0)	(0.0)	(0.0)	(18.8)	(8.3)	(1.4)	(0.0)	(0.0)		
Neoplasms benign, malignant												
and unspecified (incl cysts and	^	-			6	^		_	6			
polyps)	0	2	0	0	0	0	0	1	0	0		

Table 2
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by System Organ Class - Data as of 03/14/2019
For All Reported Adverse Events without Regard to Attribution

	IMRT	<b>Pelvic</b>	Radiati (n=125)		tment	4 Field Pelvic Radiation Treatment (n=144)					
System Organ Class	n and (%) of Patients by Grade					n and (%) of Patients by Grade					
	1	2	3	4	5	1	2	3	4	5	
	(0.0)	(1.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	
Nervous system disorders	28	7	4	0	0	29	9	1	0	0	
	(22.4)	(5.6)	(3.2)	(0.0)	(0.0)	(20.1)	(6.3)	(0.7)	(0.0)	(0.0)	
Psychiatric disorders	20	4	0	0	0	22	11	1	0	0	
	(16.0)	(3.2)	(0.0)	(0.0)	(0.0)	(15.3)	(7.6)	(0.7)	(0.0)	(0.0)	
Renal and urinary disorders	56	18	1	0	0	53	22	3	0	0	
	(44.8)	(14.4)	(0.8)	(0.0)	(0.0)	(36.8)	(15.3)	(2.1)	(0.0)	(0.0)	
Reproductive system and breast											
disorders	38	8	0	0	0	44	12	3	1	0	
	(30.4)	(6.4)	(0.0)	(0.0)	(0.0)	(30.6)	(8.3)	(2.1)	(0.7)	(0.0)	
Respiratory, thoracic and											
mediastinal disorders	21	5	1	1	0	15	8	1	1	0	
	(16.8)	(4.0)	(0.8)	(0.8)	(0.0)	(10.4)	(5.6)	(0.7)	(0.7)	(0.0)	
Skin and subcutaneous tissue											
disorders	22	4	1	0	0	31	7	0	0	0	
	(17.6)	(3.2)	(0.8)	(0.0)	(0.0)	(21.5)	(4.9)	(0.0)	(0.0)	(0.0)	
Surgical and medical											
procedures	0	0	1	0	0	0	0	1	0	0	
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	
Vascular disorders	14	9	4	1	1	12	7	3	0	0	
	(11.2)	(7.2)	(3.2)	(0.8)	(0.8)	(8.3)	(4.9)	(2.1)	(0.0)	(0.0)	

Adverse events were graded with CTCAE version 4.

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

			(n=125)			4 Field Pelvic Radiation Treatment (n=144) n and (%) of Patients by Grade						
System Organ Class/Term		<u>nd (%) o</u>					· ,		<b>*</b>			
	1	2	3	4	5	1	2	3	4	5		
BLOOD AND LYMPHATIC		_	_					_				
SYSTEM DISORDERS	16	6	5	0	0	12	4	3	0	0		
	(12.8)	(4.8)	(4.0)	(0.0)	(0.0)	(8.3)	(2.8)	(2.1)	(0.0)	(0.0)		
Anemia	15	6	5	0	0	11	4	2	0	0		
	(12.0)	(4.8)	(4.0)	(0.0)	(0.0)	(7.6)	(2.8)	(1.4)	(0.0)	(0.0)		
Febrile neutropenia	0	0	0	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
CARDIAC DISORDERS	8	0	1	0	0	4	0	0	0	0		
	(6.4)	(0.0)	(0.8)	(0.0)	(0.0)	(2.8)	(0.0)	(0.0)	(0.0)	(0.0)		
Sinus bradycardia	1	0	1	0	0	0	0	0	0	0		
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
EAR AND LABYRINTH												
DISORDERS	8	2	1	0	0	14	2	0	0	0		
	(6.4)	(1.6)	(0.8)	(0.0)	(0.0)	(9.7)	(1.4)	(0.0)	(0.0)	(0.0)		
Hearing impaired	0	0	1	0	0	0	1	0	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	(0.0)		
GASTROINTESTINAL						` '						
DISORDERS	62	40	12	0	0	66	43	14	1	0		
	(49.6)	(32.0)	(9.6)	(0.0)	(0.0)	(45.8)	(29.9)	(9.7)	(0.7)	(0.0)		
Abdominal pain	35	9	2	0	0	43	8	6	0	0		
•	(28.0)	(7.2)	(1.6)	(0.0)	(0.0)	(29.9)	(5.6)	(4.2)	(0.0)	(0.0)		
Colitis	1	0	0	0	0	2	0	3	0	0		
	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(1.4)	(0.0)	(2.1)	(0.0)	(0.0)		
Colonic obstruction	0	0	0	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Diarrhea	66	24	6	0	0	74	32	7	0	0		
Diamina	(52.8)	(19.2)	(4.8)	(0.0)	(0.0)	(51.4)	(22.2)	(4.9)	(0.0)	(0.0)		
Gastrointestinal disorders -	(32.0)	(1).2)	(1.0)	(0.0)	(0.0)	(31.1)	(22.2)	(1.2)	(0.0)	(0.0)		
Other	9	1	0	0	0	3	5	2	0	0		
omer	(7.2)	(0.8)	(0.0)	(0.0)	(0.0)	(2.1)	(3.5)	(1.4)	(0.0)	(0.0)		
Ileal obstruction	0	0.0)	0.0)	0.0)	0.0)	0	0	1	0.0)	0.0)		
near obstruction	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Intra-abdominal hemorrhage	0.0)	0.0)	0.0)	0.0)	0.0)	0.0)	0.0)	0.7)	(0.0)	0.0)		
mua-abdominai nemormage			(0.0)					(0.0)				
Novaca	(0.0)	(0.0)	. ,	(0.0)	(0.0)	(0.0)	(0.0)	` /	(0.7)	(0.0)		
Nausea	39	9	2	0	0	48	11	3	0	0		
Dua stiti s	(31.2)	(7.2)	(1.6)	(0.0)	(0.0)	(33.3)	(7.6)	(2.1)	(0.0)	(0.0)		
Proctitis	3	6	1	0	0	5	4	0	0	0		
	(2.4)	(4.8)	(0.8)	(0.0)	(0.0)	(3.5)	(2.8)	(0.0)	(0.0)	(0.0)		

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

	IMRT Pelvic Radiation Treatment (n=125)					4 Field Pelvic Radiation Treatment (n=144)					
System Organ Class/Term		<u>nd (%) o</u>					<u>ad (%) o</u>				
~ 44	1	2	3	4	5	1	2	3	4	5	
Small intestinal obstruction	0	1	1	0	0	0	0	1	0	0	
	(0.0)	(0.8)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	
Vomiting	13	2	1	0	0	20	6	3	0	0	
	(10.4)	(1.6)	(0.8)	(0.0)	(0.0)	(13.9)	(4.2)	(2.1)	(0.0)	(0.0)	
GENERAL DISORDERS AND											
ADMINISTRATION SITE	72	25	2	0	0	76	25	2	0	0	
CONDITIONS	73	25	2	0	0	76	25	3	0	0	
E .:	(58.4)	(20.0)	(1.6)	(0.0)	(0.0)	(52.8)	(17.4)	(2.1)	(0.0)	(0.0)	
Fatigue	71	18	2	0	0	70	22	2	0	0	
FN 111	(56.8)	(14.4)	(1.6)	(0.0)	(0.0)	(48.6)	(15.3)	(1.4)	(0.0)	(0.0)	
Flu like symptoms	1	0	1	0	0	4	0	0	0	0	
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(2.8)	(0.0)	(0.0)	(0.0)	(0.0)	
Pain	15	5	0	0	0	18	2	1	0	0	
	(12.0)	(4.0)	(0.0)	(0.0)	(0.0)	(12.5)	(1.4)	(0.7)	(0.0)	(0.0)	
HEPATOBILIARY											
DISORDERS	1	0	0	0	0	0	0	1	0	0	
	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	
Gallbladder pain	0	0	0	0	0	0	0	1	0	0	
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	
IMMUNE SYSTEM				_					_		
DISORDERS	1	0	1	0	0	0	2	0	0	0	
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	
Allergic reaction	1	0	1	0	0	0	2	0	0	0	
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	
INFECTIONS AND											
INFESTATIONS	4	20	4	1	0	0	16	4	0	0	
	(3.2)	(16.0)	(3.2)	(0.8)	(0.0)	(0.0)	(11.1)	(2.8)	(0.0)	(0.0)	
Appendicitis	0	0	2	0	0	0	0	0	0	0	
	(0.0)	(0.0)	(1.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	
Device related infection	0	0	1	0	0	0	0	0	0	0	
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	
Infections and infestations -											
Other	1	3	0	0	0	0	3	1	0	0	
	(0.8)	(2.4)	(0.0)	(0.0)	(0.0)	(0.0)	(2.1)	(0.7)	(0.0)	(0.0)	
Sepsis	0	0	0	1	0	0	0	0	0	0	
	(0.0)	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	
Upper respiratory infection	0	4	0	0	0	0	2	1	0	0	
-	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(1.4)	(0.7)	(0.0)	(0.0)	
Urinary tract infection	0	13	0	0	0	0	9	1	0	0	

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

	IMRT	Γ Pelvic	Radiation (n=125)		tment	4 Field Pelvic Radiation Treatment (n=144)						
System Organ Class/Term	n and (%) of Patients by Grade					n and (%) of Patients by Grade						
	1	2	3	4	5	1	2	3	4	5		
	(0.0)	(10.4)	(0.0)	(0.0)	(0.0)	(0.0)	(6.3)	(0.7)	(0.0)	(0.0)		
Wound infection	0	0	1	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
INJURY, POISONING AND PROCEDURAL												
COMPLICATIONS	11	6	1	0	0	14	8	0	0	0		
	(8.8)	(4.8)	(0.8)	(0.0)	(0.0)	(9.7)	(5.6)	(0.0)	(0.0)	(0.0)		
Fall	0	0	1	0	0	1	0	0	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	(0.0)	(0.0)		
INVESTIGATIONS	12	14	14	1	0	13	16	9	0	0		
	(9.6)	(11.2)	(11.2)	(0.8)	(0.0)	(9.0)	(11.1)	(6.3)	(0.0)	(0.0)		
Creatinine increased	3	1	1	0	0	1	0	0	0	0		
	(2.4)	(0.8)	(0.8)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	(0.0)	(0.0)		
Lymphocyte count												
decreased	1	6	7	0	0	3	6	8	0	0		
	(0.8)	(4.8)	(5.6)	(0.0)	(0.0)	(2.1)	(4.2)	(5.6)	(0.0)	(0.0)		
Lymphocyte count increased	0	0	0	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Neutrophil count decreased	0	5	2	1	0	2	3	3	0	0		
	(0.0)	(4.0)	(1.6)	(0.8)	(0.0)	(1.4)	(2.1)	(2.1)	(0.0)	(0.0)		
Platelet count decreased	8	2	1	0	0	4	1	1	0	0		
	(6.4)	(1.6)	(0.8)	(0.0)	(0.0)	(2.8)	(0.7)	(0.7)	(0.0)	(0.0)		
Weight gain	1	1	1	0	0	1	0	0	0	0		
	(0.8)	(0.8)	(0.8)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	(0.0)	(0.0)		
Weight loss	5	4	1	0	0	6	3	0	0	0		
	(4.0)	(3.2)	(0.8)	(0.0)	(0.0)	(4.2)	(2.1)	(0.0)	(0.0)	(0.0)		
White blood cell decreased	8	5	8	0	0	3	10	3	0	0		
	(6.4)	(4.0)	(6.4)	(0.0)	(0.0)	(2.1)	(6.9)	(2.1)	(0.0)	(0.0)		
METABOLISM AND	22	10	0		0	20	0			0		
NUTRITION DISORDERS	22	12	8	1	0	28	9	4	1	0		
	(17.6)	(9.6)	(6.4)	(0.8)	(0.0)	(19.4)	(6.3)	(2.8)	(0.7)	(0.0)		
Anorexia	18	7	1	0	0	20	7	0	0	0		
D 1 1 4	(14.4)	(5.6)	(0.8)	(0.0)	(0.0)	(13.9)	(4.9)	(0.0)	(0.0)	(0.0)		
Dehydration	0	5	1	0	0	0	2	1	0	0		
II	(0.0)	(4.0)	(0.8)	(0.0)	(0.0)	(0.0)	(1.4)	(0.7)	(0.0)	(0.0)		
Hyperglycemia	7	0	3	0	0	10	4	1	1	0		
II-m - d1-m'	(5.6)	(0.0)	(2.4)	(0.0)	(0.0)	(6.9)	(2.8)	(0.7)	(0.7)	(0.0)		
Hyperkalemia	4	0	1	1	0	0	0	0	0	0		

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

	IMRT Pelvic Radiation Treatment (n=125)					4 Field Pelvic Radiation Treatment (n=144)						
System Organ Class/Term	n an	f Patien	n and (%) of Patients by Grade									
	1	2	3	4	5	1	2	3	4	5		
	(3.2)	(0.0)	(0.8)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
Hypokalemia	6	0	1	0	0	4	0	1	0	0		
	(4.8)	(0.0)	(0.8)	(0.0)	(0.0)	(2.8)	(0.0)	(0.7)	(0.0)	(0.0)		
Hypomagnesemia	9	3	0	0	0	4	0	1	0	0		
	(7.2)	(2.4)	(0.0)	(0.0)	(0.0)	(2.8)	(0.0)	(0.7)	(0.0)	(0.0)		
Hyponatremia	9	0	1	0	0	7	0	0	0	0		
• •	(7.2)	(0.0)	(0.8)	(0.0)	(0.0)	(4.9)	(0.0)	(0.0)	(0.0)	(0.0)		
Obesity	0	0	1	0	0	0	0	0	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
MUSCULOSKELETAL AND CONNECTIVE TISSUE												
DISORDERS	21	12	0	0	0	27	12	2	0	0		
	(16.8)	(9.6)	(0.0)	(0.0)	(0.0)	(18.8)	(8.3)	(1.4)	(0.0)	(0.0)		
Muscle weakness lower limb	0	0	0	0	0	1	0	1	0	0		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.7)	(0.0)	(0.0)		
Musculoskeletal and connective tissue disorder - Other	1 (0.8)	3 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	1 (0.7)	0 (0.0)	0 (0.0)		
NEOPLASMS BENIGN, MALIGNANT AND UNSPECIFIED (INCL CYSTS AND POLYPS)	0 (0.0)	2 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)		
Neoplasms benign, malignant and unspecified (incl cysts and polyps) - Other	0 (0.0)	2 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)	0 (0.0)	0 (0.0)		
NERVOUS SYSTEM	(010)	(210)	(313)	(010)	(010)	(010)	(313)	(317)	(313)	(010)		
DISORDERS	28	7	4	0	0	29	9	1	0	0		
	(22.4)	(5.6)	(3.2)	(0.0)	(0.0)	(20.1)	(6.3)	(0.7)	(0.0)	(0.0)		
Peripheral motor neuropathy	3 (2.4)	0 (0.0)	1 (0.8)	0 (0.0)	0 (0.0)	2 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)		
Peripheral sensory												
neuropathy	5	2	1	0	0	9	3	1	0	0		
1 7	(4.0)	(1.6)	(0.8)	(0.0)	(0.0)	(6.3)	(2.1)	(0.7)	(0.0)	(0.0)		
Syncope	0	0	3	0.07	0	0	0	0	0	0		
-Jop-	(0.0)	(0.0)	(2.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

		<b>Pelvic</b>	4 Field Pelvic Radiation Treatment (n=144)									
System Organ Class/Term	n and (%) of Patients by Grade					n and (%) of Patients by Grade						
	1	2	3	4	5	1	2	3	4	5		
PSYCHIATRIC DISORDERS	20	4	0	0	0	22	11	1	0	0		
	(16.0)	(3.2)	(0.0)	(0.0)	(0.0)	(15.3)	(7.6)	(0.7)	(0.0)	(0.0)		
Depression	9	0	0	0	0	7	4	1	0	0		
	(7.2)	(0.0)	(0.0)	(0.0)	(0.0)	(4.9)	(2.8)	(0.7)	(0.0)	(0.0)		
RENAL AND URINARY												
DISORDERS	56	18	1	0	0	53	22	3	0	0		
	(44.8)	(14.4)	(0.8)	(0.0)	(0.0)	(36.8)	(15.3)	(2.1)	(0.0)	(0.0)		
Renal and urinary disorders												
- Other	6	3	1	0	0	7	1	0	0	0		
	(4.8)	(2.4)	(0.8)	(0.0)	(0.0)	(4.9)	(0.7)	(0.0)	(0.0)	(0.0)		
Urinary incontinence	16	7	0	0	0	12	7	2	0	0		
	(12.8)	(5.6)	(0.0)	(0.0)	(0.0)	(8.3)	(4.9)	(1.4)	(0.0)	(0.0)		
Urinary tract obstruction	0	0	0	0	0	1	0	1	0	0		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.7)	(0.0)	(0.0)		
REPRODUCTIVE SYSTEM												
AND BREAST DISORDERS	38	8	0	0	0	44	12	3	1	0		
	(30.4)	(6.4)	(0.0)	(0.0)	(0.0)	(30.6)	(8.3)	(2.1)	(0.7)	(0.0)		
Reproductive system and												
breast disorders - Other	5	0	0	0	0	6	0	0	1	0		
	(4.0)	(0.0)	(0.0)	(0.0)	(0.0)	(4.2)	(0.0)	(0.0)	(0.7)	(0.0)		
Vaginal dryness	4	0	0	0	0	7	0	1	0	0		
	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(4.9)	(0.0)	(0.7)	(0.0)	(0.0)		
Vaginal stricture	4	0	0	0	0	2	4	2	0	0		
•	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(1.4)	(2.8)	(1.4)	(0.0)	(0.0)		
RESPIRATORY, THORACIC AND MEDIASTINAL												
DISORDERS	21	5	1	1	0	15	8	1	1	0		
	(16.8)	(4.0)	(0.8)	(0.8)	(0.0)	(10.4)	(5.6)	(0.7)	(0.7)	(0.0)		
Cough	11	1	0	0	0	9	2	1	0	0		
, and the second	(8.8)	(0.8)	(0.0)	(0.0)	(0.0)	(6.3)	(1.4)	(0.7)	(0.0)	(0.0)		
Dyspnea	14	1	1	0	0	9	5	0	1	0		
	(11.2)	(0.8)	(0.8)	(0.0)	(0.0)	(6.3)	(3.5)	(0.0)	(0.7)	(0.0)		
Hypoxia	0	0	0	0	0	0	1	1	0	0		
**	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.7)	(0.0)	(0.0)		
Pleural effusion	0	0	1	0	0	2	0	0	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	(0.0)		
Respiratory failure	0	0	0	1	0	0	0	0	0	0		
- sopratory rando	(0.0)	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		

Table 3
Distribution of RTOG 1203 Patients by Highest Grade Adverse Event by Specific Adverse Event Term - Data as of 03/14/2019
For Selected Adverse Events without Regard to Attribution

	IMRT	Pelvic	Radiati (n=125)		tment	4 Field Pelvic Radiation Treatment (n=144)						
System Organ Class/Term	n and (%) of Patients by Grade					n and (%) of Patients by Grade						
	1	2	3	4	5	1	2	3	4	5		
Respiratory, thoracic and												
mediastinal disorders - Other	1	2	0	0	0	0	0	1	0	0		
	(0.8)	(1.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Sore throat	0	0	1	0	0	1	0	0	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)	(0.0)	(0.0)		
SKIN AND SUBCUTANEOUS TISSUE												
DISORDERS	22	4	1	0	0	31	7	0	0	0		
	(17.6)	(3.2)	(0.8)	(0.0)	(0.0)	(21.5)	(4.9)	(0.0)	(0.0)	(0.0)		
Pruritus	7	0	1	0	0	9	1	0	0	0		
	(5.6)	(0.0)	(0.8)	(0.0)	(0.0)	(6.3)	(0.7)	(0.0)	(0.0)	(0.0)		
SURGICAL AND MEDICAL												
PROCEDURES	0	0	1	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Surgical and medical												
procedures - Other	0	0	1	0	0	0	0	1	0	0		
	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
VASCULAR DISORDERS	14	9	4	1	1	12	7	3	0	0		
	(11.2)	(7.2)	(3.2)	(0.8)	(0.8)	(8.3)	(4.9)	(2.1)	(0.0)	(0.0)		
Hot flashes	8	4	1	0	0	7	3	1	0	0		
	(6.4)	(3.2)	(0.8)	(0.0)	(0.0)	(4.9)	(2.1)	(0.7)	(0.0)	(0.0)		
Hypertension	2	3	2	0	0	2	6	0	0	0		
	(1.6)	(2.4)	(1.6)	(0.0)	(0.0)	(1.4)	(4.2)	(0.0)	(0.0)	(0.0)		
Hypotension	1	0	0	0	1	0	0	1	0	0		
	(0.8)	(0.0)	(0.0)	(0.0)	(0.8)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Thromboembolic event	0	1	1	1	0	0	0	1	0	0		
	(0.0)	(0.8)	(0.8)	(0.8)	(0.0)	(0.0)	(0.0)	(0.7)	(0.0)	(0.0)		
Vascular disorders - Other	1	0	1	0	0	0	0	0	0	0		
	(0.8)	(0.0)	(0.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)		

Adverse events were graded with CTCAE version 4.

Only includes system organ classes and terms with at least one grade 3, 4, or 5.