



**DEPARTMENT OF VETERANS AFFAIRS**  
**Veterans Health Administration**  
**National Health Physics Program**  
**2200 Fort Roots Drive**  
**North Little Rock, AR 72114**

**OCT 29 2009**

In Reply Refer To: 598/115HP/NLR

Steven A. Reynolds  
Director, Division of Nuclear Material Safety  
Region III, Nuclear Regulatory Commission (NRC)  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532-4352

Re: NRC License 03-23853-01VA

Dear Mr. Reynolds:

Per a telephone request by Cassandra Frazier on October 29, 2009, I am enclosing final medical event data from VA Medical Center, Philadelphia.

This data was previously sent to your staff by e-mail on October 19, 2009, and is in the format of a table with results for a review of prostate seed implants completed at the medical center.

If you have any questions, please contact me at 501-257-1571.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Williams".

Gary E. Williams  
Interim Director, National Health Physics Program

Enclosure

RECEIVED NOV 03 2009

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PVAMC Patient ID #	Implant Date	Postplan CT Date	Prescribed Dose (Gy)	Date possible medical event declared by PVAMC to NHPP	Date medical event reported by NHPP to NRC Ops Center	Date of required written report by NHPP to NRC Region III	Medical Event Reporting Phase: 1, 2, or Later	Basis for Reporting as Medical Event: Phase 1, 2, or Later	Number of Redundant Seeds Identified	Total Number of Seeds Implanted		Number of Seeds Outside DTS		Calculated % of Seeds Within DTS	
										Based on Original Day-1 CT Post Plan Data	Final Value (Corrected for Recovered Seeds)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 001	8/13/2007	8/14/2007	160	6/20/2008	6/6/2008	6/21/2008	1	D90(prostate) < 80%	3	54	54	10	10	81%	81%
XRT 002	9/16/2002	9/17/2002	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	2	42	42	0	0	100%	100%
XRT 003	6/20/2005	6/21/2005	160	10/1/2008	10/2/2008	10/16/2008	2	D90 < 80% & 5+ seeds outside the DTS	0	80	78	5	4	94%	95%
XRT 004	2/14/2005	2/15/2005	160	10/1/2008	10/2/2008	10/16/2008	2	3+ seeds in bladder wall	2	75	75	1	1	99%	99%
XRT 005	5/19/2003	5/20/2003	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	1	81	81	4	4	95%	95%
XRT 006	1/9/2006	1/10/2006	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	3	67	67	34	34	49%	49%
XRT 007	11/26/2007	11/27/2007	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	1	83	83	5	5	94%	94%
XRT 008	5/12/2008	5/13/2008	160	7/22/2008	10/2/2008	10/16/2008	1	D90(prostate) < 80%	0	85	95	6	6	93%	94%
XRT 009	12/6/2004	12/7/2004	160	10/1/2008	7/22/2008	8/4/2008	2	3+ seeds in bladder wall	7	83	83	7	6	92%	93%
XRT 010	6/12/2006	6/13/2006	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	4	60	60	12	11	80%	82%
XRT 011	10/3/2005	10/4/2005	160	10/1/2008	10/2/2008 (See note 10)	10/16/2008	2	3+ seeds in bladder wall	0	45	43	11	11	76%	74%
XRT 012	7/11/2005	7/12/2005	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	8	81	81	1	1	99%	99%
XRT 013	5/15/2006	5/16/2006	160	8/12/2008	8/13/2008	8/26/2008	1	D90(prostate) < 80%	3	89	89	16	16	82%	82%
XRT 014	12/8/2003	12/9/2003	160	NR	NR	NR	NR	NR	4	74	74	1	1	99%	99%
XRT 015	11/1/2004	11/2/2004	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	82	82	8	7	90%	91%
XRT 016	9/12/2005	9/13/2005	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	0	56	57	10	6	82%	89%
XRT 017	9/25/2006	9/26/2006	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	6	82	82	1	1	99%	99%
XRT 018(1)	2/3/2003	2/4/2003	160	10/1/2008	10/2/2008 (See note 11)	10/16/2008	2	D1.33 Rectum (sum of two treatments) >150%	0	34	34	12	4	65%	88%
XRT 018(2)	3/31/2003	4/1/2003							7	66	66	See composite	See composite	See composite	See composite
018:Composite										100	100	9	9	91%	91%
XRT 019	8/30/2004	8/31/2004	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	9	89	88	15	13	83%	85%
XRT 020	2/25/2002	2/26/2002	160	8/5/2008	8/6/2008	8/19/2008	1	D90(prostate) < 80%	NA	73	73	1	1	99%	99%
XRT 021	6/13/2005	6/14/2005	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	5	82	77	4	2	95%	97%
XRT 022	7/22/2002	7/23/2002	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	3	69	68	0	0	100%	100%
XRT 023	11/26/2007	11/27/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	3	79	79	11	11	86%	86%
XRT 024	1/3/2005	1/4/2005	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	7	56	56	3	1	95%	98%
XRT 025	5/7/2007	5/8/2007	160	7/9/2008	7/10/2008	7/22/2008	1	D90(prostate) < 80%	NA	NA	77	NA: Indeterminate <sup>4</sup>		NA: Indeterminate <sup>4</sup>	
XRT 026	10/18/2004	10/19/2004	145	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	6	70	70	4	3	94%	96%
XRT 027	1/14/2008	1/15/2008	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	NA	74	74	30.5	28	59%	62%

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PVAMC Patient ID #	Implant Date	Postplan CT Date	Prescribed Dose (Gy)	Date possible medical event declared by PVAMC to NHPP	Date medical event reported by NHPP to NRC Ops Center	Date of required written report by NHPP to NRC Region III	Medical Event Reporting Phase: 1, 2, or Later	Basis for Reporting as Medical Event: Phase 1, 2, or Later	Number of Redundant Seeds Identified	Total Number of Seeds Implanted		Number of Seeds Outside DTS		Calculated % of Seeds Within DTS	
										Based on Original Day-1 CT Post Plan Data	Final Value (Corrected for Recovered Seeds)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 028	11/25/2002	11/26/2002	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	62	62	3.5	3	94%	95%
XRT 029	8/23/2004	8/24/2004	160	NR	NR	NR	NR	NR	8	85	85	0	0	100%	100%
XRT 030	2/6/2006	2/7/2006	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	79	79	10	10	87%	87%
XRT 031	10/2/2006	10/3/2006	160	7/9/2008	7/10/2008	7/22/2008	1	D90(prostate) < 80%	NA	NA	84	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>
XRT 032	5/9/2005	5/10/2005	160	8/12/2008	8/13/2008	8/26/2008	1	D90(prostate) < 80%	8	79	79	3	0	96%	100%
XRT 033	4/10/2006	4/11/2006	160	7/22/2008	7/22/2008	8/4/2008	1	D90(prostate) < 80%	NA	NA	86	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>	NA: Indeterminate <sup>4</sup>
XRT 034	6/28/2004	6/29/2004	160	NR	NR	NR	NR	NR	5	79	78	0	0	100%	100%
XRT 035	2/11/2008	2/12/2008	160	8/12/2008	8/13/2008	8/26/2008	1	D90(prostate) < 80%	0	70	70	3	3	96%	96%
XRT 036	8/15/2005	8/16/2005	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	0	54	54	2	2	96%	96%
XRT 037	10/31/2005	11/1/2005	160	8/5/2008	8/6/2008	8/19/2008	1	D90(prostate) < 80%	2	86	86	13	12	85%	86%
XRT 038	9/27/2004	9/28/2004	145	7/17/2008	7/18/2008	7/31/2008	1	D90(prostate) < 80%	0	76	75	6	4	92%	95%
XRT 039	6/16/2003	6/17/2003	160	NR	NR	NR	NR	NR	2	55	55	1	0	98%	100%
XRT 040	6/20/2005	6/21/2005	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	0	84	84	0	0	100%	100%
XRT 041	6/5/2006	6/6/2006	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	2	68	68	5	4	93%	94%
XRT 042	9/8/2003	9/9/2003	160	10/1/2008	10/2/2008	10/16/2008	2	3+ seeds in bladder wall	0	65	65	5	4	92%	94%
XRT 043	2/26/2007	2/27/2007	160	NR	NR	NR	NR	NR	1	73	73	6	6	92%	92%
XRT 044	3/27/2006	3/28/2006	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	0	61	61	9	9	85%	85%
XRT 045	11/14/2005	11/15/2005	160	7/22/2008	7/22/2008	8/4/2008	1	D90(prostate) < 80%	6	77	77	1	0	99%	100%
XRT 046	6/14/2004	6/15/2004	160	NR	NR	NR	NR	NR	4	59	63	0	0	100%	100%
XRT 047	5/3/2004	5/4/2004	160	NR	NR	NR	NR	NR	0	66	67	0	0	100%	100%
XRT 048	10/15/2007	10/16/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	8	79	79	4	3	95%	96%
XRT 049	9/27/2004	9/28/2004	145	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	1	54	54	3	2	94%	96%
XRT 050	12/13/2004	12/14/2004	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	5	77	77	0	0	100%	100%
XRT 051	3/19/2007	3/20/2007	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	0	78	78	8	8	90%	90%
XRT 052	9/30/2002	10/1/2002	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	1	54	52	0	0	100%	100%
XRT 053	1/10/2005	1/11/2005	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	9	63	58	7	5	89%	91%
XRT 054	1/22/2007	1/23/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	3	54	54	0	0	100%	100%
XRT 055	3/10/2008	3/11/2008	160	NR	NR	NR	NR	NR	8	76	76	1	1	99%	99%
XRT 056	2/23/2004	2/24/2004	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	3	74	72	2	0	97%	100%
XRT 057	12/5/2005	12/6/2005	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	4	72	76	12	12	83%	84%
XRT 058	7/11/2005	7/12/2005	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	1	77	77	2	1	97%	99%

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PVAMC Patient ID #	Implant Date	Postplan CT Date	Prescribed Dose (Gy)	Date possible medical event declared by PVAMC to NHPP	Date medical event reported by NHPP to NRC Ops Center	Date of required written report by NHPP to NRC Region III	Medical Event Reporting Phase: 1, 2, or Later	Basis for Reporting as Medical Event: Phase 1, 2, or Later	Number of Redundant Seeds Identified	Total Number of Seeds Implanted		Number of Seeds Outside DTS		Calculated % of Seeds Within DTS	
										Based on Original Day-1 CT Post Plan Data	Final Value (Corrected for Recovered Seeds)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 059	1/12/2004	1/13/2004	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	0	66	66	0	0	100%	100%
XRT 060	3/22/2004	3/23/2004	160	NR	NR	NR	NR	NR	1	48	48	0	0	100%	100%
XRT 061	4/11/2005	4/12/2005	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	5	76	74	5	5	93%	93%
XRT 062(1)	10/25/2004	10/26/2004	160	7/25/2008	7/25/2008	8/7/2008	1	D90(prostate) < 80%	1	52	52	1	0	98%	100%
XRT 062(2)	2/7/2005	2/8/2005							8	38	38	See composite	See composite	See composite	See composite
062:Composite										90	90	1	0	99%	100%
XRT 063	11/19/2007	11/20/2007	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	6	86	88	2	2	98%	98%
XRT 064	10/7/2002	10/8/2002	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	8	73	73	3	0	96%	100%
XRT 065	8/15/2005	8/16/2005	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	1	66	66	7	7	89%	89%
XRT 066	7/18/2005	7/19/2005	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	0	61	61	14	14	77%	77%
XRT 067	7/2/2007	7/3/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) > 150%	0	53	54	2	4	96%	93%
XRT 068	5/1/2006	5/2/2006	160	7/22/2008	7/22/2008	8/4/2008	1	D90(prostate) < 80%	4	60	60	5	3	92%	95%
XRT 069	8/30/2004	8/31/2004	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	6	70	70	0	0	100%	100%
XRT 070	5/5/2008	5/6/2008	160	5/15/2008	5/16/2008	5/30/2008	1	D90(prostate) < 80%	0	44	44	2	1	95%	98%
XRT 071	11/15/2004	11/16/2004	160	10/1/2008	10/2/2008	10/16/2008	2	3+ seeds in bladder wall	9	64	64	17	10	73%	84%
XRT 072	7/9/2007	7/10/2007	160	7/22/2008	7/22/2008	8/4/2008	1	D90(prostate) < 80%	0	76	76	3	3	96%	96%
XRT 073	11/4/2002	11/5/2002	160	10/1/2008	10/2/2008	10/16/2008	2	3+ seeds in bladder wall	2	86	86	5	5	94%	94%
XRT 074	9/10/2007	9/11/2007	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	78	78	7	6	91%	92%
XRT 075	5/8/2006	5/9/2006	160	NR	NR	NR	NR	NR	12	75	75	0	1	100%	99%
XRT 076	11/20/2006	11/21/2006	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	NA	NA	71	NA: Indeterminate <sup>4</sup>		NA: Indeterminate <sup>4</sup>	
XRT 077	3/3/2008	3/4/2008	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	0	59	59	1	1	98%	98%
XRT 078	3/6/2006	3/7/2006	160	6/24/2008	6/25/2008	7/9/2008	1	D90(prostate) < 80%	0	68	68	21	20	69%	71%
XRT 079	4/3/2006	4/4/2006	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	9	61	61	8	6	87%	90%
XRT 080	10/22/2007	10/23/2007	160	6/20/2008	6/12/2008	6/21/2008	1	D90(prostate) < 80%	8	97	97	34	27	65%	72%
XRT 081	1/31/2005	2/1/2005	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	13	93	93	2	1	98%	99%
XRT 082	1/8/2007	1/9/2007	160	8/5/2008	8/6/2008	8/19/2008	1	D90(prostate) < 80%	2	67	67	11	10	84%	85%
XRT 083	2/7/2005	2/8/2005	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	7	73	73	0	0	100%	100%
XRT 084	8/27/2007	8/28/2007	160	7/2/2008	7/2/2008	7/15/2008	1	D90(prostate) < 80%	NA	NA	64	NA: Indeterminate <sup>4</sup>		NA: Indeterminate <sup>4</sup>	
XRT 085	4/14/2008	4/15/2008	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	0	79	79	6	6	92%	92%
XRT 086	10/16/2006	10/17/2006	160	NR	NR	NR	NR	NR	0	69	70	2	2	97%	97%
XRT 087	1/24/2005	1/25/2005	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	5	50	50	2	2	96%	96%

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PVAMC Patient ID #	Implant Date	Postplan CT Date	Prescribed Dose (Gy)	Date possible medical event declared by PVAMC to NHPP	Date medical event reported by NHPP to NRC Ops Center	Date of required written report by NHPP to NRC Region III	Medical Event Reporting Phase: 1, 2, or Later	Basis for Reporting as Medical Event: Phase 1, 2, or Later	Number of Redundant Seeds Identified	Total Number of Seeds Implanted		Number of Seeds Outside DTS		Calculated % of Seeds Within DTS	
										Based on Original Day-1 CT Post Plan Data	Final Value (Corrected for Recovered Seeds)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 088	5/15/2006	5/16/2006	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	2	83	81	9	6	89%	93%
XRT 089	10/21/2002	10/22/2002	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	84	84	1	1	99%	99%
XRT 090	6/18/2007	6/19/2007	160	NR	NR	NR	NR	NR	0	59	59	2	2	97%	97%
XRT 091	3/27/2006	3/28/2006	160	8/5/2008	8/6/2008	8/19/2008	1	D90(prostate) < 80%	7	62	62	3	1	95%	98%
XRT 092	12/5/2005	12/6/2005	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	0	75	74	11	2	85%	97%
XRT 093	10/6/2003	10/7/2003	160	8/12/2008	8/13/2008	8/26/2008	1	D90(prostate) < 80%	2	55	55	4	3	93%	95%
XRT 094	1/14/2008	1/15/2008	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	1	82	83	6	6	93%	93%
XRT 095	7/21/2003	7/22/2003	160	10/1/2008	10/2/2008	10/16/2008	2	5+ seeds outside the DTS	0	55	55	7	7	87%	87%
XRT 096	3/15/2004	3/16/2004	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	1	71	71	25	22	65%	69%
XRT 097	11/27/2006	11/28/2006	160	7/7/2008	7/8/2008	7/21/2008	1	D90(prostate) < 80%	3	80	80	0	0	100%	100%
XRT 098	9/29/2003	9/30/2003	160	7/17/2008	7/18/2008	7/31/2008	1	D90(prostate) < 80%	0	76	77	17	15	78%	81%
XRT 099	9/18/2006	9/19/2006	160	NR	NR	NR	NR	NR	0	82	82	2	2	98%	98%
XRT 100	12/1/2003	12/2/2003	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	1	80	80	0	0	100%	100%
XRT 101	6/2/2008	6/3/2008	160	NR	NR	NR	NR	NR	4	91	91	0	0	100%	100%
XRT 102	2/25/2008	2/26/2008	160	8/21/2008	8/22/2008	9/4/2008	1	D90(prostate) < 80%	0	58	58	15	15	74%	74%
XRT 103	2/12/2007	2/13/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	9	81	81	5	3	94%	96%
XRT 104	11/13/2006	11/14/2006	160	7/17/2008	7/18/2008	7/31/2008	1	D90(prostate) < 80%	NA	NA	70	NA: Indeterminate <sup>4</sup>		NA: Indeterminate <sup>4</sup>	
XRT 105	8/28/2006	8/29/2006	160	7/25/2008	7/25/2008	8/7/2008	1	D90(prostate) < 80%	0	58	58	6	4	90%	93%
XRT 106	11/7/2005	11/8/2005	160	NR	NR	NR	NR	NR	0	59	63	1	1	98%	98%
XRT 107	1/22/2007	1/23/2007	160	NR	NR	NR	NR	NR	6	80	80	5	4	94%	95%
XRT 108	7/17/2006	7/18/2006	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	8	86	86	9	4	90%	95%
XRT 109	6/14/2004	6/15/2004	160	7/15/2008	7/15/2008	7/30/2008	1	D90(prostate) < 80%	4	56	56	3	5	95%	91%
XRT 110	9/13/2004	9/14/2004	160	NR	8/12/2009	8/27/2009	Later	D90(prostate) < 80%	8	66	66	1	0	98%	100%
XRT 111	4/23/2007	4/24/2007	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	NA	NA	80	NA: Indeterminate <sup>4</sup>		NA: Indeterminate <sup>4</sup>	
XRT 112	4/19/2004	4/20/2004	160	10/1/2008	10/2/2008	10/16/2008	1	D90(prostate) < 80%	1	56	56	0	0	100%	100%
XRT 113	2/28/2005	3/1/2005	160	NR	NR	NR	NR	NR	1	70	70	3	1	96%	99%
XRT 114	7/24/2006	7/25/2006	160	10/1/2008	10/2/2008	10/16/2008	2	D1.33(Rectum) >150%	0	69	69	6	7	91%	90%

**Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)**

1	17	18	19	20	21	22	23	24	25	26	27	28	29
PVAMC Patient ID #	Prostate Dose, D90 (Gy)			Rectum Dose, D1.33cc (Gy)			Bladder Wall Dose, D1cc (Gy)			Peri-Prostatic Tissue External to DTS Dose D1cc (Gy) and Volume (cc)			
	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Dose: Based on Day-1 CT (Before Correction)	Volume: Based on Day-1 CT (Before Correction)	Final Dose (Corrected for Redundant and/or Recovered Seeds, as applicable)	Final Volume (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 001	89	NA	89	113	NA	113	28	NA	32	299	468	292	470
XRT 002	104	NRD	102	89	NRD	84	99	NRD	107	65	655	68	654
XRT 003	115	NRD	113	104	NRD	104	74	NRD	73	126	379	158	507
XRT 004	143	143	144	86	88	85	149	140	140	124	348	112	321
XRT 005	98	NA	95	112	NA	113	78	NA	63	232	534	233	534
XRT 006	113	40	39	127	124	124	29	29	29	471	625	483	741
XRT 007	105	NRD	109	204	NRD	199	23	NRD	24	204	641	197	630
XRT 008	125	90	120	101	122	129	54	35	157	201	431	204	431
XRT 009	125	118	118	108	68	118	209	163	163	281	451	201	431
XRT 010	81	NA	78	100	NA	118	36	NA	31	364	378	352	367
XRT 011	47	NA	40	56	NA	66	144	NA	184	224	560	215	822
XRT 012	120	NRD	129	147	NRD	105	97	NRD	116	135	414	120	414
XRT 013	103	NRD	97	111	NRD	101	45	NRD	43	283	519	325	483
XRT 014	144	144	143	112	86	82	160	130	134	110	255	117	242
XRT 015	136	143	143	106	93	93	96	88	88	173	659	173	659
XRT 016	101	NA	116	44	NA	40	123	NA	116	224	793	180	942
XRT 017	109	NRD	110	125	NRD	111	34	NRD	44	214	365	149	353
XRT 018(1)	28	NA	29	60	NA	52	138	NA	153	132	450	130	669
XRT 018(2)	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite
018:Composite	208	208	203	328	328	318	194	194	196	610	307	355	300
XRT 019	135	92	104	151	126	130	39	37	40	502	597	475	597
XRT 020	94	NA	94	110	NA	114	NV	NA	No CT- Bladder NV	No CT images imported, Plan based on digitized image -no PP tissue			
XRT 021	130	128	137	186	136	133	97	87	117	128	602	144	625
XRT 022	60	NA	61	148	NA	136	208	NA	236	78	301	79	300
XRT 023	146	146	140	169	169	151	69	69	68	196	535	222	529
XRT 024	123	113	121	84	98	108	92	117	98	181	412	129	412
XRT 025	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 026	113	NA	119	182	NA	173	90	NA	95	194	646	164	646
XRT 027	67	NA	67	196	NA	196	42	NA	42	588	595	588	595

**Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)**

1	17	18	19	20	21	22	23	24	25	26	27	28	29
PVAMC Patient ID #	Prostate Dose, D90 (Gy)			Rectum Dose, D1.33cc (Gy)			Bladder Wall Dose, D1cc (Gy)			Peri-Prostatic Tissue External to DTS Dose D1cc (Gy) and Volume (cc)			
	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Dose: Based on Day-1 CT (Before Correction)	Volume: Based on Day-1 CT (Before Correction)	Final Dose (Corrected for Redundant and/or Recovered Seeds, as applicable)	Final Volume (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 028	146	146	146	50	47	47	169	98	99	168	562	168	562
XRT 029	130	152	130	124	124	117	114	114	121	129	318	133	314
XRT 030	99	NA	99	134	NA	134	51	NA	51	243	594	234	678
XRT 031	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 032	107	NA	123	106	NA	100	43	NA	48	126	271	96	271
XRT 033	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 034	146	NRD	145	96	NRD	92	85	NRD	100	80	340	72	340
XRT 035	144	105	106	165	205	187	55	55	56	162	481	141	511
XRT 036	103	NA	103	82	NA	82	165	NA	165	78	422	78	422
XRT 037	91	NA	91	130	NA	137	83	NA	82	341	340	350	366
XRT 038	127	NA	126	96	NA	95	165	NA	167	129	440	122	459
XRT 039	130	130	129	84	80	77	92	ND	77	129	342	127	341
XRT 040	141	122	122	150	NA	150	54	NA	54	109	462	109	462
XRT 041	124	132	132	85	131	123	44	ND	45	162	366	167	366
XRT 042	91	NA	91	77	NA	77	65	NA	65	215	265	215	265
XRT 043	144	143	144	85	85	85	82	ND	82	180	409	180	408
XRT 044	106	NA	106	131	NA	131	58	NA	58	258	323	263	394
XRT 045	150	116	117	130	131	121	50	50	55	135	308	118	308
XRT 046	149	NRD	See note #9	82	NRD	See note #9	93	NRD	See note #9	61	337	See note #9	See note #9
XRT 047	141	137	142	122	91	91	66	85	88	77	648	78	648
XRT 048	175	NRD	169	158	NRD	158	127	NRD	127	148	315	148	317
XRT 049	128	NRD	131	106	NRD	114	95	NRD	91	107	367	94	368
XRT 050	95	NA	95	169	NA	167	131	NA	128	87	439	101	505
XRT 051	152	115	115	124	164	164	66	ND	67	225	307	225	307
XRT 052	63	NA	60	50	NA	49	180	NA	169	77	635	76	635
XRT 053	118	NRD	112	110	NRD	92	72	NRD	108	165	384	165	384
XRT 054	181	NRD	178	157	NRD	144	70	NRD	71	99	338	95	338
XRT 055	157	138	139	125	100	100	65	69	70	122	431	122	431
XRT 056	76	NA	73	106	NA	105	78	NA	58	79	390	81	392
XRT 057	126	98	101	130	164	161	49	ND	56	343	348	337	385
XRT 058	102	NA	102	80	NA	80	67	NA	74	86	513	86	512

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	17	18	19	20	21	22	23	24	25	26	27	28	29
PVAMC Patient ID #	Prostate Dose, D90 (Gy)			Rectum Dose, D1.33cc (Gy)			Bladder Wall Dose, D1cc (Gy)			Peri-Prostatic Tissue External to DTS Dose D1cc (Gy) and Volume (cc)			
	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Dose: Based on Day-1 CT (Before Correction)	Volume: Based on Day-1 CT (Before Correction)	Final Dose (Corrected for Redundant and/or Recovered Seeds, as applicable)	Final Volume (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 059	118	NRD	118	94	NRD	94	89	NRD	89	81	377	81	377
XRT 060	138	141	139	92	92	92	81	ND	81	75	407	75	427
XRT 061	123	NRD	120	115	NRD	113	79	NRD	73	201	342	201	340
XRT 062(1)	49	NA	48	24	NA	27	70	NA	79	36	712	37	712
XRT 062(2)	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite	See composite
062:Composite	70	NA	64	104	NA	122	61	NA	61	87	396	76	386
XRT 063	145	114	129	132	132	119	43	43	48	193	458	142	458
XRT 064	113	110	107	195	205	212	123	122	110	130	640	130	640
XRT 065	93	NA	92	123	NA	124	49	NA	49	200	451	199	452
XRT 066	111	84	84	185	186	183	63		71	319	359	319	359
XRT 067	168	167	175	106	98	100	96	ND	99	131	265	102	303
XRT 068	84	NA	102	75	NA	84	21	NA	26	239	298	165	299
XRT 069	125	110	110	72	69	71	51	50	49	71	613	68	629
XRT 070	100	NRD	100	118	NRD	118	34	NRD	34	99	270	99	270
XRT 071	111	NRD	123	160	NRD	145	84	NRD	98	212	421	156	426
XRT 072	177	121	126	126	119	127	65	ND	65	134	311	139	325
XRT 073	129	129	129	158	99	105	158	138	149	183	413	158	422
XRT 074	173	156	156	103	103	102	74	74	74	239	310	239	310
XRT 075	138	131	134	142	ND	125	69	ND	69	121	239	125	246
XRT 076	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 077	89	NA	89	69	NA	120	41	NA	41	132	485	132	485
XRT 078	75	NA	75	77	NA	77	30	NA	23	437	415	437	415
XRT 079	110	NA	103	66	NA	60	50	NA	47	243	307	231	332
XRT 080	125	46	42	111	104	106	56	29	27	522	819	509	819
XRT 081	109	NRD	125	108	NRD	98	71	NRD	70	127	632	121	1161
XRT 082	106	NA	105	103	NA	98	46	NA	49	225	458	223	546
XRT 083	125	128	128.3	65	ND	84	30	ND	21	145	349	111	349
XRT 084	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 085	151	103	103	146	ND	146	54	ND	50	209	483	209	483
XRT 086	148	132	132	158	143	152	46	46	51	107	413	112	506
XRT 087	106	NA	100	139	NA	146	54	NA	51	121	331	102	318

Revised Prostate Brachytherapy Information for Philadelphia VAMC (October 19, 2009)

1	17	18	19	20	21	22	23	24	25	26	27	28	29
PVAMC Patient ID #	Prostate Dose, D90 (Gy)			Rectum Dose, D1.33cc (Gy)			Bladder Wall Dose, D1cc (Gy)			Peri-Prostatic Tissue External to DTS Dose D1cc (Gy) and Volume (cc)			
	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Based on Day-1 CT: Original Contour (Before Correction)	Based on Day-1 CT: Recontoured (Before Correction)	Final Value (Corrected for Redundant and/or Recovered Seeds, as applicable)	Dose: Based on Day-1 CT (Before Correction)	Volume: Based on Day-1 CT (Before Correction)	Final Dose (Corrected for Redundant and/or Recovered Seeds, as applicable)	Final Volume (Corrected for Redundant and/or Recovered Seeds, as applicable)
XRT 088	109	NRD	111	122	NRD	116	61	NRD	60	305	428	248	500
XRT 089	83	NA	83	78	NA	87	88	NA	88	81	634	81	633
XRT 090	143	NRD	143	70	NRD	70	93	NRD	93	107	473	107	473
XRT 091	88	NA	88	95	NA	92	62	NA	53	134	307	139	310
XRT 092	133	124	130	115	ND	117	55	ND	52	300	572	157	859
XRT 093	126	90	94	119	167	169	63	52	55	233	425	236	422
XRT 094	149	129	132	109	109	107	74	74	75	172	564	176	676
XRT 095	142	142	142	120	58	79	60	53	53	235	430	235	430
XRT 096	118	86	84	96	133	133	57	43	43	429	466	481	439
XRT 097	157	110	105	111	114	124	68	71	69	205	286	135	283
XRT 098	97	NA	100	108	NA	110	55	NA	57	437	385	411	385
XRT 099	155	155	155	108	110	108	55	59	59	131	371	131	371
XRT 100	126	138	138	154	138	136	115	95	139	153	239	146	239
XRT 101	177	170	168	153	128	126	71	70	73	147	404	96	393
XRT 102	128	42	42 **	220	102	112	NV	NV	Bladder NV	350	604	326	603
XRT 103	169	164	161	171	171	159	77	77	88	208	439	208	433
XRT 104	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 105	130	NRD	130	135	NRD	135	59	NRD	59	210	518	210	518
XRT 106	144	130	138	106	99	103	97	89	100	115	257	120	289
XRT 107	159	147	145	96	84	80	55	54	54	167	530	162	531
XRT 108	91	NA	96	44	NA	45	47	NA	47	202	552	158	551
XRT 109	101	NA	99	92	NA	93	59	NA	58	207	353	224	349
XRT 110	121	NRD	119	113	NRD	96	78	NRD	70	143	286	117	301
XRT 111	NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			NA: Indeterminate <sup>4</sup>			
XRT 112	70	NA	70	78	NA	74	60	NA	60	64	277	68	282
XRT 113	129	NRD	129	82	NRD	80	90	NRD	90	205	335	88	306
XRT 114	123	NRD	123	108	NRD	107	38	NRD	38	197	568	197	568

### Notes (October 19, 2009)

Extensive corrections/revisions have been made to the data set provided to NRC by NHPP/PVAMC in August 2009 to include correction/revision not only to seed counts, dose values, and volume values, but also to other data such as patient implant dates and postplan CT dates when needed.

Note	Description
1	<b>NR Not Reported:</b> A Medical Event was Not declared/Reported for the patient.
2	<b>DTS</b> <b>Designated Treatment Site:</b> Denotes the volume including the prostate plus external tissues representing preplanned source locations designated by the Authorized User Physician. For these patients, the DTS is designated as the prostate plus a 10 mm region around the prostate.
3	<b>NRD Not Re-Drawn:</b> Denotes that the original contour was not redrawn because original contour was deemed adequate by external radiation oncologist.
4	<b>NA Not Applicable or Available:</b> Denotes that either the case was not evaluated for re-drawn contour or there was not adequate information available to evaluate the item (e.g., not able to retrieve Day-1 CT for calculations). For items specifically identified as "NA: Indeterminate" the Day-1 CT was not able to be retrieved for calculations.
5	<b>NV Not Visible:</b> Region on CT images was not visualized, or CT images are missing.
6	<b>ND Not Done:</b> External consultant therapy medical physicist determined recontoured Day-1 CT did not result in changes to dose.
7	<b>**</b> Denotes that 1st CT slice started on prostate which could result in some prostate tissue not being included in volume and dose calculatons.
8	<p><b>Redundant Seeds:</b> "Redundant Seeds" refers to false or duplicate seeds. VariSeed's redundant seed detecting algorithm attempts to detect redundant (i.e., false or duplicate) seeds in post-operative CT evaluations. VariSeed generates lists of possibly redundant seeds which the user can selectively correct. Redundant seeds are detected by checking each seed with every other seed. Any two seeds are considered redundant when they meet both of the following criteria:</p> <ul style="list-style-type: none"> <li>■ They are separated by less than the user defined Three Dimensional distance.</li> <li>■ They would be separated by less than the user defined In Plane distance if they were projected onto the same XY plane.</li> </ul> <p>The Three Dimensional distance (Philadelphia VA value= 5mm) reflects the distance between two seed identifications calculated using all three coordinates.                      The In-Plane distance (Philadelphia VA value= 0.5mm) refers to the two-dimensional distance (parallel to the imaging planes) between seeds on neighboring images.                      Reference: VariSeed User Guide (Version 7.0), Appendix B-8</p>
9	<b>Patient XRT 046:</b> This patient's original file data was used to commission new Variseed Version 7.0 software in August 2004. In doing so, the original pre- and post-treatment plans were over-written resulting in loss of original data. Hard copies of original pre- and post-plans are in the patient's clinical chart on file in PVAMC Radiation Oncology. Data from the original post-treatment plan are being reported for this report.
10	<b>Patient XRT 011:</b> This patient's treatment had been reported as a Medical Event in 2005 but was later retracted based on results of NHPP's site visit during that year. NHPP's decision to retract was based on the NRC's earlier decision that circumstances for patient XRT 018 were not a Medical Event.
11	<b>Patient XRT 018:</b> The initial treatment to patient XRT 018, denoted as XRT 018(1) in the data sheet, had been reported as a possible Medical Event in 2003 but was later determined by NRC's General Counsel not to be a Medical Event for those reporting circumstances.
12	<b>Patients XRT 019, 062 (two treatments), 069, 070, 077, and 109:</b> Dr. Kao was the prescribing physician for all patient treatments except these seven, which were prescribed by Dr. Whittington.
13	<b>Patients XRT 026, 038, and 049:</b> Note that the Prescribed Dose was 145 Gray (rather than 160 Gy) for these treatments.
14	<b>Patients XRT 059, 061, 069, 081, 083, and 110:</b> Note that Medical Events for these six patients were reported after completion of Phase 2 (denoted as "Later" in column 8).
15	<b>Peri-prostatic Dose and Volume (columns 26-29):</b> The dose and volume for the perineal region were determined from the Day 1 CT using re-drawn contour of peri-prostatic volume.
16	<b>Final Value (columns 19, 22, 25, 28, 29):</b> The final values in these columns are corrected for redundant and/or recovered seeds, when applicable, and are based on recontoured Day-1 CT results when recontouring was performed; when recontouring was not performed, corrected doses were based on original contours of the Day-1 CTs.

### Explanation of Data Columns (October 19, 2009)

Column	Description
1	Patient reference number (assigned by PVAMC)
2	Date seeds were implanted into patient
3	Date follow-up CT of patient prostate was obtained after implant; this CT was typically obtained one day after the implant (i.e., Day-1 CT) and was used to develop a post-implant dose assessment (postplan).
4	Dose in units of gray (Gy) prescribed by the physician Authorized User to the treatment volume (following a treatment preplan) in the Written Directive.
5	Date Medical Event (ME) was initially declared to NHPP as "discovered" by PVAMC pursuant to 10 CFR 35.3045(a).
6	Date ME was reported by telephone to NHPP to NRC Operations Center pursuant to 10 CFR 35.3045(c).
7	Date written report of ME was provided to NRC pursuant to 10 CFR 35.3045(d).
8	<b>Reporting phase:</b> This column lists the reporting "phase" (1, 2, or later) in which an ME was initially discovered and reported. These phases are <u>historical only</u> in that a final determination of whether or not the treatment actually resulted in a ME should be based on the final dose values. Use of the "Phase 1 and 2" terminology evolved during, and was a construct of, the earlier look-back review process. Phase 1 generally involved review of treatments with an original D90 (based on the original Day-1 postplan) to the prostate that was less than or equal to 80% of the prescribed dose. Phase 2 generally involved a review of treatments with original D90 above 80%. As part of the look-back process, later CTs of patients were performed, when possible, and a new postplan dose assessment was generated using organ/tissue contours based on the later CT. This later CT and postplan was used as the basis to declare MEs during Phases 1 and 2. After completing Phase 1 and 2 reporting, PVAMC in consultation with other medical experts, subsequently concluded that CTs performed at times distal to the treatment (i.e., greater than about 6 months), while useful as followup clinical information, were not valid for determining doses for purposes of ME reporting. So PVAMC returned to use of the Day-1 CT, when available, and performed additional reviews (including redrawing contours and recalculating doses, when deemed appropriate) to achieve a final data set. That "final" data set was provided August 6, 2009, to NHPP, who forwarded the results to NRC on August 7, 2009. Based on an evaluation of the August data set, six additional MEs (denoted as "Later" in the column) were discovered and reported by NHPP to NRC on August 12, 2009. However, the discovery of uncorrected redundant seeds and incorrect total number of seeds implanted initiated additional review and recalculation of doses for the final determination presented herein.
9	This column provides the initial basis for declaring the treatment outcome as an ME during earlier phases of the review. Information in this column is <u>historical only</u> in that a final determination of whether or not the treatment resulted in an ME should be based on the final dose values presented herein.
10	<b>Number of redundant seeds:</b> For perspective, after submission of the dose data set by PVAMC to NHPP on August 6, 2007, then by NHPP to NRC on August 7, 2009, the PVAMC discovered, around September 2, 2009, that there were errors in postplan seed identification and dose assessments for some patients. The input to the software used to calculate postplan doses had not been corrected for redundant seeds. Staff recognized that this error could significantly impact dose estimates. PVAMC notified NHPP on September 2, 2009. The issue prompted a re-evaluation of previously submitted seed count and dose data to determine the corrected data set provided herein.
11	<b>Total number of seeds implanted during treatment procedure:</b> Based on original evaluations of Day-1 CT. This column of data is provided for historical perspective only and is <b>not considered to be final, valid results.</b>
12	<b>Total number of seeds implanted during treatment procedure:</b> Based on review of Day 1 CT by independent personnel as a result of the look-back and corrected for redundant and recovered seeds. For patients with "No Day 1 CT", the total number of seeds implanted was taken from Operating Room and Radiation Safety Records of the implant. <b>These data are considered to be final, valid results.</b>
13	<b>Number of seeds implanted outside the Designated Treatment Site (DTS, which is the contoured prostate plus a 10 mm perimeter for these patients):</b> Based on original contouring of Day 1 CT. These data are provided for historical perspective only and are <b>not considered to be final, valid results.</b>
14	<b>Number of seeds implanted outside the DTS:</b> Based on recontouring of Day 1 CT (when deemed necessary) by independent personnel with correction for redundant seed issue. <b>These data are considered to be final, valid results.</b>
15	<b>Calculated percent of seeds (activity) implanted in DTS:</b> (Column 11 - Column 13) / (Column 11); Based on original contouring of Day-1 CT. This data is provided for historical perspective only and are <b>not considered to be final, valid results.</b>
16	<b>Calculated percent of seeds (activity) implanted in DTS:</b> (Column 12 - Column 14) / (Column 12); Incorporates review (including recontouring when deemed necessary) by independent personnel with correction for redundant seed issue. <b>These data are considered to be final, valid results.</b>

Column	Description
17	<b>Prostate dose, in terms of D90 (dose received by 90% of prostate volume) and in units of gray (Gy):</b> Based on original contouring of Day 1 CT. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> .
18	<b>Prostate dose, D90 (Gy):</b> Based on recontouring (when deemed necessary) of Day 1 CT by independent personnel as a result of the look-back but not corrected for redundant seed issue. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> (these values were provided in the August 7, 2009, data set sent to NRC).
19	<b>Prostate dose, D90 (Gy):</b> This column represents the final, valid dose value based on the recontoured Day-1 CT image (when performed) or on the original contour (if deemed acceptable) and includes corrections for redundant seeds.
20	<b>Rectum dose, in terms of D1.33cc (maximum dose to a 1.33 cc volume of rectal wall) in units of gray (Gy):</b> Based on original contouring of Day 1 CT. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> .
21	<b>Rectum dose, D1.33cc (Gy):</b> Based on recontouring (when deemed necessary) of Day 1 CT by independent personnel as a result of the look-back but not corrected for redundant seed issue. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> (these values were provided in the August 7, 2009, data set sent to NRC).
22	<b>Rectum dose, D1.33cc (Gy):</b> This column represents the final, valid dose value based on the recontoured Day-1 CT image (when performed) or on the original contour (if deemed acceptable) and includes corrections for redundant seeds.
23	<b>Bladder wall dose, in terms of D1cc (maximum dose to a 1 cc volume of the bladder wall) in units of gray (Gy):</b> Based on original contouring of Day 1 CT. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> .
24	<b>Bladder wall dose, D1cc (Gy):</b> Based on recontouring (when deemed necessary) of Day 1 CT by independent personnel as a result of the look-back but not corrected for redundant seed issue. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> (these values were provided in the August 7, 2009, data set sent to NRC).
25	<b>Bladder wall dose, D1cc (Gy):</b> This column represents the final, valid dose value based on the recontoured Day-1 CT image (when performed) or on the original contour (if deemed acceptable) and includes corrections for redundant seeds.
26	<b>Peri-prostatic tissue dose, in terms of Dose to 1cc (maximum dose to a 1 cc volume of tissues outside the DTS and excluding the rectum and bladder wall) in units of gray (Gy):</b> Based on recontouring (when deemed necessary) of Day 1 CT by independent personnel as a result of the look-back but not corrected for redundant seed issue. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> (these values were provided in the August 7, 2009, data set sent to NRC).
27	<b>Volume of the peri-prostatic region</b> (includes peri-prostatic tissues excluding rectum and bladder): based on contours of Day 1 CT by independent personnel as result of look-back by not corrected for redundant seed issues. This data column is provided for historical perspective only; it is <b>not considered to contain the final, valid results</b> (these values were provided in the August 7, 2009, data set sent to NRC).
28	<b>Peri-prostatic tissue dose, D1cc (Gy):</b> This column represents the final, validated dose value based on the recontoured Day-1 CT image (when performed) or on the original contour (if deemed acceptable) and includes corrections for redundant seeds. <b>This column represents the final, valid dose values.</b>
29	<b>Volume of the peri-prostatic region</b> (includes peri-prostatic tissues excluding rectum and bladder) after considering any corrections for redundant seeds. <b>This column represents the final, valid dose values.</b>

From: Origin ID: LITA (501) 257-1571  
Kelly Mayo  
VHA National Health Physics Pr  
2200 FORT ROOTS DR  
B101 R208D  
NORTH LITTLE ROCK, AR 72114



Ship Date: 30OCT09  
ActWgt: 0.5 LB  
CAD: 5250401/NET9090  
Account#: S \*\*\*\*\*

Delivery Address Bar Code

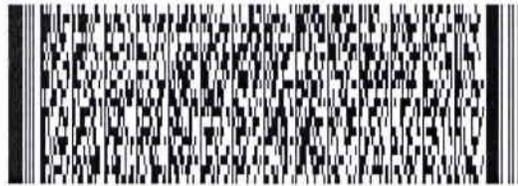


SHIP TO: (501) 257-1571 **BILL SENDER**  
**Steven Reynolds**  
  
**2443 WARRENVILLE RD**  
  
**LISLE, IL 60532**

Ref #  
Invoice #  
PO #  
Dept #

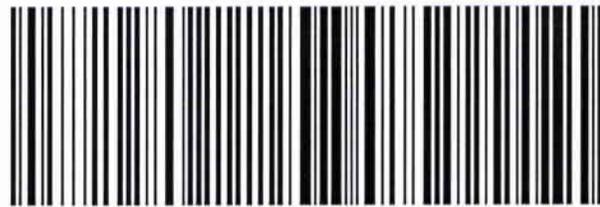
**MON - 02NOV A1**  
**STANDARD OVERNIGHT**

TRK# 7960 8007 4726  
0201



**60532**  
**IL-US**  
**ORD**

**XH ENLA**



**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.