

## ATC Publications

Publications that involved ATC support in press or published are listed below:

1. Bradley JD, Hope A, El Naqa I, Apte A, Lindsay PE, Bosch W, Matthews J, Sause W, Graham MV, Deasy JO: A Nomogram to Predict Radiation Pneumonitis, Derived From a Combined Analysis of RTOG 9311 and Institutional Data. *Int. J. Radiat. Oncol. Biol. Phys.*, 69(4):985-992, 2007.
2. Bosch W, Matthews J, Straube W, Purdy J: QuASAR: Quality Assurance Submission, Analysis, and Review System for Advanced Technology Clinical Trials in Radiation Therapy, in the Proceedings of the XVth International Conference on the Use of Computers in Radiation Therapy, June 4-7, 2007, Toronto, Canada, edited by Jean-Pierre Bissonnette, Published by Novel Digital Publishing, Oakville, Ontario, Canada, p. 98-102, 2007.
3. Ibbott GS, Molineu A, Followill DS: Independent Evaluations of IMRT Through the use of an Anthropomorphic Phantom. *Technology in Cancer Research and Treatment*, 5(5):481-487, 2006.
4. Matthews JW, Bosch WR: Explicit-VR Transfer Syntax Limits the Value Multiplicity of DICOM Data Elements with Decimal String (DS) Value Representation. *Phys. Med. Biol.*, 51:L11-L12, 2006.
5. Timmerman R, Galvin J, Michalski J, Straube W, Ibbott, G, Martin, E, Abdulrahman, R, Swann, S, Fowler, J and Choy, H: Accreditation and quality assurance for Radiation Therapy Oncology Group: Multicenter clinical trials using Stereotactic Body Radiation Therapy in lung cancer, *Acta Oncologica*, 45(7):779- 786, 2006.
6. Vicini F, Winter K, Straube W, Wong J, Pass H, Rabinovitch R, Chafe S, Arthur D, Petersen I, McCormick B: A phase I/II trial to evaluate three-dimensional conformal radiation therapy confined to the region of the lumpectomy cavity for Stage I/II breast carcinoma: initial report of feasibility and reproducibility of Radiation Therapy Oncology Group (RTOG) Study 0319. *Int. J. Radiat. Oncol. Biol. Phys.*, 63(5):1531-1537, 2005.
7. Molineu M, Followill DS, Balter PA, Hanson WF, Gillin MT, Huq MS, Eisbruch A, and Ibbott GS. Design and Implementation of an Anthropomorphic Quality Assurance Phantom for Intensity-Modulated Radiation Therapy for the Radiation Therapy Oncology Group. *Int J Radiat Oncol Biol Phys*, Vol. 63(2): 577–583, 2005.
8. Michalski, J.M., Winter, K., Purdy, J.A., Parliament, M.B., Wong, H., Perez, C.A., Roach III, M., Bosch, W., and Cox, J.D.: Toxicity After Three-Dimensional Radiotherapy for Prostate Cancer on RTOG 9406 Dose Level V. *Int. J. Radiat. Oncol. Biol. Phys.*, 62(3):706-713, 2005.
9. Bradley J, Graham M, Winter K, Purdy J, Komaki R, Roa W, Ryu J, Bosch W, and Emami B: Toxicity and Outcome Results of RTOG 9311; a Phase I/II Dose Escalation Study using Three-Dimensional Conformal Radiotherapy in Patients with Inoperable Non-Small Cell Lung Carcinoma. *Int J Radiat Onco Biol Phys*, 61 (2):318-328, 2005.
10. Roach III M, Winter K, Michalski J, Cox J, Purdy J, Bosch W, Lin X, and Shipley W: Penile Bulb Dose and Impotence After Three-Dimensional Conformal Radiotherapy for Prostate Cancer on RTOG 9406: Findings From A Prospective, Multi-Institutional, Phase I/II Dose-Escalation Study. *Int J Radiat Onco Biol Phys*, 60 (5):1351-1356, 2004.

11. Palta, JR, Deye, JA, Ibbott, GS, Purdy, JA, and Urie, MM: Credentialing of institutions for IMRT in clinical trials (Correspondence). *Int. J. Radiat. Oncol. Biol. Phys*, 59(43):1257-1259, 2004.
12. Michalski J, Winter K, Purdy JA, Perez C, Ryu J, Parliament M, Valicenti R, Roach III M, Sandler H, Markoe A, Cox J. "Toxicity After Three-Dimensional Radiotherapy for Prostate Cancer with RTOG 9406 Dose Level IV". *Int J Radiat Onco Biol Phys*, 58(3): 735-742, 2004.
13. Valicenti R., Winter K, Cox J, Sandler H, Bosch W, Vijayakumar S, Michalski J, Purdy JA. "RTOG 94-06: Is the Addition of Neoadjuvant Hormonal Therapy to Dose-Escalated 3D Conformal Radiation Therapy for Prostate Cancer Associated with Treatment Toxicity." *Int J Radiat Onco Biol Phys* 57(3): 614-620, 2003.
14. Michalski J, Winter K, Purdy JA, Wilder R, Perez C, Roach III M, Parliament M, Pollack A, Markoe A, Harms Sr WB, Sandler H, Cox J. "Preliminary Evaluation of Low Grade Toxicity with Conformal Radiation Therapy for Prostate Cancer on RTOG 94-06 Dose Levels I & II." *Int J Radiat Onco Biol Phys* 56(1): 192-198, 2003.
15. Michalski J, Winter K, Purdy J, Wilder R, Perez C., Roach III M, Parliament M, Pollack A, Markoe A, Harms Sr WB, Sandler H, and Cox J: Trade-Off to Low Grade Toxicity with Conformal Radiation Therapy for Prostate Cancer on RTOG 94-06. *Sem in Rad Oncol* 12 (1 (Suppl 1)):75-80, 2002.
16. Ryu J, Winter K, Michalski J, Purdy J, Markoe A, Earle J, Perez C, Roach III M, Sandler H, Pollack A, and Cox J: Interim Report of toxicity from 3DCRT for prostate cancer on 3DOG/RTOG 9406, Level III (79.2 Gy). *Int J Radiat Onco Biol Phys* 54:1036-1046, 2002.
17. Michalski JM, Winter K, Purdy JA, Wilder R, Perez CA, Roach M, Parliament MB, Pollack A, Markoe A, Harms WB, Sandler HM, and Cox JD: Grade 2 toxicity on RTOG 9406: Robbing Peter to pay Paul?, in *Biological and Physical Basis of IMRT and Tomotherapy*. Edited by B.R. Paliwal, D.E. Herbert, J.F. Fowler, M.P. Mehta, Medical Physics Publishing, Madison, WI, pp. 48-54, 2002.
18. Purdy JA, Harms WB, Michalski JM, Bosch WR: Quality Assurance for 3-D CRT/IMRT Multi-Institutional Clinical Trials, in *3-D Conformal and Intensity Modulated Radiation Therapy*. Edited by J.A. Purdy, W.H. Grant III, J.R. Palta, E.B. Butler, and C.A. Perez, Advanced Medical Physics Publishing, Madison, WI, pp. 553-560, 2001.
19. Michalski JM, Purdy JA, Harms WB, Bosch WR. 3-D CRT for Prostate Cancer: An Update of RTOG 94-06, in *3DCRT and IMRT*. Edited by J.A. Purdy, W.H. Grant III, J.R. Palta, E.B. Butler, and C.A. Perez, Advanced Medical Physics Publishing, Madison, WI, pp. 477-482, 2001.
20. Matthews JW, Harms WB, Bosch WR, Purdy JA, Digital data exchange for multi-institutional clinical trials in 3D conformal radiotherapy and prostate brachytherapy, in The Use of Computers in Radiation Therapy (Proceedings of the XIIIth International Conference, Heidelberg, Germany), edited by W. Schlegel and T. Bortfeld, Springer Publishing, Berlin, p. 116-118, 2000.
21. Bosch WR, Harms WB, Matthews JW, Purdy JA, Database infrastructure for multi-institutional clinical trials in 3D conformal radiotherapy and prostate brachytherapy, in The Use of Computers in Radiation Therapy (Proceedings of the XIIIth International Conference, Heidelberg, Germany), edited by W. Schlegel and T. Bortfeld, Springer Publishing, Berlin, p. 483-485, 2000.

22. J. M. Michalski, J. A. Purdy, K. Winter, M. Roach, S. Vijayakumar, H. M. Sandler, A. M. Markoe, M. A. Ritter, K. J. Russell, S. Sailer, W. B. Harms, C. A. Perez, R. B. Wilder, G. E. Hanks and J. D. Cox: Preliminary Report of Toxicity Following 3D Radiation Therapy For Prostate Cancer on 3DOG/RTOG 9406. *Int J Radiat Oncol Biol Phys* 46 (2):391-402, 2000.
23. Harms, W.B. and Purdy, J.A.: Technical Requirements for Participating in 3-D CRT Multi-Institutional Clinical Trials, in A Practical Guide to 3-D Planning and Conformal Radiation Therapy, edited by J.A. Purdy and G. Starkschall. Advanced Medical Publishing, Inc., Madison, Wisconsin, p. 323-340, 1999.
24. Purdy, J.A., Harms, W.B., Michalski, J.M., and Bosch, W.R.: Initial Experience with Quality Assurance of Multi-Institutional 3D Radiotherapy Clinical Trials. *Strahlentherapie und Onkologie* 174(II):40-42, 1998.
25. Bosch, W.R., Lakanen, T.L., Kahn, M.G., Harms, W.B. and Purdy, J.A.: An Image/Clinical Database for Multi-Institutional Clinical Trials in 3D Conformal Radiation Therapy, in Proceedings of XII International Conference on the use of Computers in Radiation therapy, edited by D.D. Leavitt and G. Starkschall, Medical Physics Publishing, Madison, WI, p. 455-457, 1997.
26. Harms, W.B., Bosch, W.R. and Purdy, J.A.: An Interim Digital Data Exchange Standard for Multi-Institutional 3D Conformal Radiation Therapy Trials, in Proceedings of XII International Conference on the use of Computers in Radiation therapy, edited by D.D. Leavitt and G. Starkschall, Medical Physics Publishing, Madison, WI, p. 465-468, 1997
27. Purdy, J.A., Harms, W.B., Michalski, J. and Cox, J.D.: Multi-Institutional Clinical Trials: 3-D Conformal Radiotherapy Quality Assurance, in 3-D Conformal Radiotherapy, A New Era in the Irradiation of Cancer, edited by J.L. Meyer and J.A. Purdy, Volume 29 of *Frontiers of Radiation Therapy and Oncology*, S. Karger AG, Basel, p. 255-263, 1996

### **Abstracts**

1. Bosch WR, Straube WL, Matthews JW, Michalski JM, Deasy JO, Young B, O'Meara E, Curran WJ, Cox JD, Purdy JA: A Survey of the ITC Volumetric Treatment Planning Data Archive Supporting RTOG Advanced Technology Clinical Trials (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S195, 2007.
2. Xiao Y, Straube WL, Bosch WR, Timmerman RD, Galvin J: Dosimetric Evaluation of Heterogeneity Corrections for RTOG 0236: Hypofractionated Radiotherapy of Inoperable Stage I/II Non-small Cell Lung Cancer (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S46-S47, 2007.
3. Michalski JM, Lawton C, El-Naqa I, Ritter MA, Pisansky T, Catton CN, Valicenti RK, Seider MJ, Sandler HM, Bosch W: Variation in the Definition of Clinical Target Volumes for Postoperative Conformal Radiation Therapy of Prostate Cancer (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S326, 2007.
4. Lee NY, Harris J, Garden A, Straube W, Bosch W, Morrison WH, Quivey J, Thorstadt W, Jones C, Ang K: Phase II Multi-Institutional Study of IMRT ± Chemotherapy for Nasopharyngeal Carcinoma (RTOG 0225): Preliminary Results (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S13-S14, 2007.
5. Cheung MR, Tucker SL, Dong L, Bosch WR, Michalski J, Winter K, Mohan R, Kuban D, Lee AK, Cox JD: Dose-Volume Analyses of Grade ≥ 2 Late Rectal Toxicity Among Patients Treated on Protocol RTOG 94-06 (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S9, 2007.

6. Tucker SL, Dong L, Bosch WR, Michalski J, Winter K, Lee AK, Cheung MR, Kuban DA, Cox JD, Mohan R: Fit of a Generalized Lyman Normal-Tissue Complication Probability (NTCP) Model to Grade  $\geq 2$  Late Rectal Toxicity Data From Patients Treated on Protocol RTOG 94-06 (Abstract) *Int. J. Radiat. Oncol. Biol. Phys.*, 69(3), S8-S9, 2007.
7. Sharma A, Saltz J, Pan T, Bosch W, Deasy J, Purdy J: Application of caGrid® Middleware to Facilitate Quality Assurance for Advanced Technology Radiation Therapy Clinical Trials (Abstract) In: Radiological Society of North America scientific assembly and annual meeting program. Oak Brook, Ill: Radiological Society of North America, 2007.
8. Khullar D, Molineu A, Followill D, Bosch W, Willcut V, Simpson T, Ju T, Deasy J: An Open-Source Software Tool to Support Film-Based IMRT Quality Assurance. (Abstract) *Med. Phys.*, 34(6), 2418, 2007.
9. El Naqa I, Michalski JM, Lawton C, Apte A, Bosch W, Deasy JO: Investigation of statistical methods to analyze target volume definition among experts in radiotherapy treatment planning. (Abstract) 9th Biennial ESTRO Meeting on Physics and Radiation Technology for Clinical Radiotherapy, Spain, Barcelona, September 8-13, 2007.
10. Eisbruch A, Harris J, Chao C, Garden A, Straube W, Schultz C, Sanguineti G, Jones C, Bosch W, and Ang KK: Phase II Multi-Institutional Study of IMRT for Oropharyngeal Cancer (RTOG 00-22): Early Results (abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 66(3), Supplement, Page S46, 2006.
11. Molineu A, Alvarez P, Hernandez N, Followill DS, Ibbott GS: Report of Quality Assurance Measurements that were Performed Prior to Irradiations of a Head and Neck IMRT Anthropomorphic Phantom (abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 66(3), Supplement, Page S128, 2006.
12. Purdy JA, Bosch WR, Straube WL, Matthews JW, Haynes RJ, Michalski JM, Martin EA, Winter K, Curran Jr. WJ, and Cox JD: A Review of the Activities of the ITC in Support of RTOG Advanced Technology Clinical Trials (abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 66(3), Supplement, Page S134, 2006.
13. Alvarez P, Molineu A, Hernandez N, Followill DS, and Ibbott GS: Analysis of Multiple Irradiations of an Anthropomorphic Thorax Phantom containing Lung Heterogeneities (abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 66(3), Supplement, Page S685, 2006.
14. Bosch W, Matthews J, Ulin K, Urie M, Yorty J, Straube W, FitzGerald TJ, Purdy J: Implementation of ATC Method 1 for Clinical Trials Data Review at the Quality Assurance Review Center (Abstract). *Med. Phys.* 33(6): 2109, 2006.
15. Matthews J, Bosch W, Straube W, Purdy J: ITC Assists Developers of ATC Compliant DICOM Export for Clinical Trials (Abstract). *Med. Phys.* 33(6): 2117, 2006.
16. Bosch W, O'Leary S, Matthews J, Frouhar V, Palta J, Field C, Pho L, Purdy J: Testing of ATC Method 2 for Supporting QA of Cooperative Group Advanced Technology Clinical Trials Requiring Digital Data Submission (Abstract). *Med. Phys.* 33(6): 2139, 2006.
17. Purdy J, Lehmann J, Wessol D, Cogliati J, Milvich M, Frederickson C, Nigg D, Wemple C: Implementation of MINERVA/PEREGRINE as an ATC review tool (Abstract). *Med. Phys.* 33(6): 2272, 2006.
18. Perks J, Price RA, Goetsch S, Chen A, Purdy J: Feasibility Study into Glass Rod Detectors as a "Postal Dosimeter" (Abstract). *Med. Phys.* 33(6): 2104, 2006.
19. Straube W, Bosch W, Matthews J, Haynes R, Purdy J: Digital Data Integrity QA for Multi-Institutional Clinical Trials (Abstract). *Med. Phys.* 33(6): 2087, 2006.

20. Fox W, Berkey B, Michalski J, Purdy J, Simpson J, Kresl J, Curran J, Diaz A, Mehta M, and Movsas B: Health-Related Quality of Life and Cognitive Status in Patients with Glioblastoma Multiforme Receiving Escalating Doses of Conformal Three-Dimensional Radiation on RTOG 9803 (Abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 63, Supplement 1, Page S78, 2005.
21. Straube W, Matthews J, Bosch W, and Purdy JA:DVH Analysis: Consequences for Quality Assurance of Multi-Institutional Clinical Trials (Abstract). *Med. Phys.*32(6): 2021, 2005.
22. Hope AJ, El Naqa I, Bradley J, Vicic M, Lindsay PE, Bosch WR, Purdy JA, Deasy J: Radiation Pneumonitis/Fibrosis Risk Based on Dosimetric, Clinical, and Location-Related Parameters (Abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 60(1): S204, 2004.
23. Michalski JM, Winter K, Roach M, Markoe AM, Sandler HM, Ryu J, Parliament M, Purdy JA, Valicenti RK, and Cox JD: Clinical Outcome of Patients Treated with 3D Conformal Radiation Therapy for Prostate Cancer on RTOG 9406 (Abstract). *Int. J. Radiat. Oncol. Biol. Phys.*, 60(1): S169, 2004.
24. Werner-Wasik M, Seiferheld W, Michalski JM, Gilbert M, Purdy JA, Simpson J, Kresl J, Curran WJ, Diaz A, Mehta M: Phase I/II Conformal Three-Dimensional Radiation Therapy Dose Escalation Study in Patients with Supratentorial Glioblastoma Multiforme: Report of the RTOG 98-03 Protocol (Abstract).. *Int. J. Radiat. Oncol. Biol. Phys.*, 60(1): S163, 2004.