

MODELOS CLINICO-DOSIMETRICOS
PREDICTIVOS DEL CONTROL BIOQUIMICO
DEL CANCER DE PROSTATA
ORGANO-CONFINADO TRATADO MEDIANTE
IMPLANTES RADIOACTIVOS PERMANENTES

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REFERENCIAS

BIBLIOGRAFICAS

1. Olson TR. ADAM® Atlas de anatomía humana. Barcelona: MASSON - Williams & Wilkins España S.A.; 1997.
2. Potenziani JC. Historia de la Urología (y II); 2006.
3. McNeal JE. Regional morphology and pathology of the prostate. *Am J Clin Pathol* 1968;49:347-357.
4. Williams PL, Warwick R. Gray Anatomía. Barcelona: Salvat; 1985.
5. Albertsen PC, Fryback DG, Storer BE, *et al.* Long-term survival among men with conservatively treated localized prostate cancer. *Jama* 1995;274:626-631.
6. Chodak GW, Thisted RA, Gerber GS, *et al.* Results of conservative management of clinically localized prostate cancer. *N Engl J Med* 1994;330:242-248.
7. Murphy M, Johnston C, Whelan P, *et al.* Changing trends in prostatic cancer. *BJU Int* 1999;83:786-791.
8. Isaacs W, De Marzo A, Nelson WG. Focus on prostate cancer. *Cancer Cell* 2002;2:113-116.
9. Scardino PT, Weaver R, Hudson MA. Early detection of prostate cancer. *Hum Pathol* 1992;23:211-222.
10. Barrett-Connor E, Garland C, McPhillips JB, *et al.* A prospective, population-based study of androstenedione, estrogens, and prostatic cancer. *Cancer Res* 1990;50:169-173.
11. Kyprianou N, Isaacs JT. Activation of programmed cell death in the rat ventral prostate after castration. *Endocrinology* 1988;122:552-562.
12. Thompson IM, Goodman PJ, Tangen CM, *et al.* The influence of finasteride on the development of prostate cancer. *N Engl J Med* 2003;349:215-224.
13. Ross R, Bernstein L, Judd H, *et al.* Serum testosterone levels in healthy young black and white men. *J Natl Cancer Inst* 1986;76:45-48.
14. Ross RK, Bernstein L, Lobo RA, *et al.* 5-alpha-reductase activity and risk of prostate cancer among Japanese and US white and black males. *Lancet* 1992;339:887-889.
15. Roach M, 3rd, Lu J, Pilepich MV, *et al.* Race and survival of men treated for prostate cancer on radiation therapy oncology group phase III randomized trials. *J Urol* 2003;169:245-250.
16. Chuba PJ, Moughan J, Forman JD, *et al.* The 1989 patterns of care study for prostate cancer: five-year outcomes. *Int J Radiat Oncol Biol Phys* 2001;50:325-334.
17. McNeal JE, Bostwick DG. Intraductal dysplasia: a premalignant lesion of the prostate. *Hum Pathol* 1986;17:64-71.
18. Epstein JI, Potter SR. The pathological interpretation and significance of prostate needle biopsy findings: implications and current controversies. *J Urol* 2001;166:402-410.
19. Carter BS, Bova GS, Beaty TH, *et al.* Hereditary prostate cancer: epidemiologic and clinical features. *J Urol* 1993;150:797-802.
20. Hanus MC, Zagars GK, Pollack A. Familial prostate cancer: outcome following radiation therapy with or without adjuvant androgen ablation. *Int J Radiat Oncol Biol Phys* 1999;43:379-383.
21. Bova GS, Partin AW, Isaacs SD, *et al.* Biological aggressiveness of hereditary prostate cancer: long-term evaluation following radical prostatectomy. *J Urol* 1998;160:660-663.
22. Gronberg H, Damber L, Tavelin B, *et al.* No difference in survival between sporadic, familial and hereditary prostate cancer. *Br J Urol* 1998;82:564-567.

23. Kupelian PA, Klein EA, Witte JS, *et al.* Familial prostate cancer: a different disease? *J Urol* 1997;158:2197-2201.
24. Kupelian PA, Reddy CA, Reuther AM, *et al.* Aggressiveness of familial prostate cancer. *J Clin Oncol* 2006;24:3445-3450.
25. Dennis LK, Lynch CF, Torner JC. Epidemiologic association between prostatitis and prostate cancer. *Urology* 2002;60:78-83.
26. Hayes RB, Pottorn LM, Strickler H, *et al.* Sexual behaviour, STDs and risks for prostate cancer. *Br J Cancer* 2000;82:718-725.
27. Calle EE, Rodriguez C, Walker-Thurmond K, *et al.* Overweight, obesity, and mortality from cancer in a prospectively studied cohort of U.S. adults. *N Engl J Med* 2003;348:1625-1638.
28. Calle EE, Teras LR, Thun MJ. Obesity and mortality. *N Engl J Med* 2005;353:2197-2199.
29. Fincham SM, Hill GB, Hanson J, *et al.* Epidemiology of prostatic cancer: a case-control study. *Prostate* 1990;17:189-206.
30. Hsing AW, McLaughlin JK, Hrubec Z, *et al.* Tobacco use and prostate cancer: 26-year follow-up of US veterans. *Am J Epidemiol* 1991;133:437-441.
31. Hsing AW, McLaughlin JK, Schuman LM, *et al.* Diet, tobacco use, and fatal prostate cancer: results from the Lutheran Brotherhood Cohort Study. *Cancer Res* 1990;50:6836-6840.
32. Elghany NA, Schumacher MC, Slattery ML, *et al.* Occupation, cadmium exposure, and prostate cancer. *Epidemiology* 1990;1:107-115.
33. Gleason D. The Veteran's Administration Cooperative Urologic Research Group: histologic grading and clinical staging of prostatic carcinoma. In: Tannenbaum M, editor. *Urologic Pathology: The Prostate*. Philadelphia: Lea and Febiger; 1977. pp. 171-198.
34. Ruijter E, van Leenders G, Miller G, *et al.* Errors in histological grading by prostatic needle biopsy specimens: frequency and predisposing factors. *J Pathol* 2000;192:229-233.
35. Allsbrook WC, Jr., Mangold KA, Johnson MH, *et al.* Interobserver reproducibility of Gleason grading of prostatic carcinoma: urologic pathologists. *Hum Pathol* 2001;32:74-80.
36. Gerber GS, Chodak GW. Digital rectal examination in the early detection of prostate cancer. *Urol Clin North Am* 1990;17:739-744.
37. Partin AW, Yoo J, Carter HB, *et al.* The use of prostate specific antigen, clinical stage and Gleason score to predict pathological stage in men with localized prostate cancer. *J Urol* 1993;150:110-114.
38. Carvalhal GF, Smith DS, Mager DE, *et al.* Digital rectal examination for detecting prostate cancer at prostate specific antigen levels of 4 ng./ml. or less. *J Urol* 1999;161:835-839.
39. Schroder FH, van der Maas P, Beemsterboer P, *et al.* Evaluation of the digital rectal examination as a screening test for prostate cancer. Rotterdam section of the European Randomized Study of Screening for Prostate Cancer. *J Natl Cancer Inst* 1998;90:1817-1823.
40. Brawer MK, Chetner MP, Beatie J, *et al.* Screening for prostatic carcinoma with prostate specific antigen. *J Urol* 1992;147:841-845.
41. Armbruster DA. Prostate-specific antigen: biochemistry, analytical methods, and clinical application. *Clin Chem* 1993;39:181-195.
42. Filella X, Molina R, Ballesta AM, *et al.* Value of PSA (prostate-specific antigen) in the detection of prostate cancer in patients with urological symptoms. Results of a multicentre study. *Eur J Cancer* 1996;32A:1125-1128.
43. Zlotta AR, Djavan B, Marberger M, *et al.* Prostate specific antigen density of the transition zone: a new effective parameter for prostate cancer prediction. *J Urol* 1997;157:1315-1321.
44. Sobin LH, Wittekind C. *TNM Classification of malignant tumours*. 6th ed: Willey-Liss; 1997.
45. Rifkin MD, Zerhouni EA, Gatsonis CA, *et al.* Comparison of magnetic resonance imaging

- and ultrasonography in staging early prostate cancer. Results of a multi-institutional cooperative trial. *N Engl J Med* 1990;323:621-626.
46. D'Amico AV, Schnall M, Whittington R, *et al.* Endorectal coil magnetic resonance imaging identifies locally advanced prostate cancer in select patients with clinically localized disease. *Urology* 1998;51:449-454.
 47. Cheng GC, Chen MH, Whittington R, *et al.* Clinical utility of endorectal MRI in determining PSA outcome for patients with biopsy Gleason score 7, PSA \leq 10, and clinically localized prostate cancer. *Int J Radiat Oncol Biol Phys* 2003;55:64-70.
 48. Levran Z, Gonzalez JA, Diokno AC, *et al.* Are pelvic computed tomography, bone scan and pelvic lymphadenectomy necessary in the staging of prostatic cancer? *Br J Urol* 1995;75:778-781.
 49. Chybowski FM, Keller JJ, Bergstralh EJ, *et al.* Predicting radionuclide bone scan findings in patients with newly diagnosed, untreated prostate cancer: prostate specific antigen is superior to all other clinical parameters. *J Urol* 1991;145:313-318.
 50. Lee N, Fawaaz R, Olsson CA, *et al.* Which patients with newly diagnosed prostate cancer need a radionuclide bone scan? An analysis based on 631 patients. *Int J Radiat Oncol Biol Phys* 2000;48:1443-1446.
 51. de Jong IJ, Pruijm J, Elsinga PH, *et al.* 11C-choline positron emission tomography for the evaluation after treatment of localized prostate cancer. *Eur Urol* 2003;44:32-38; discussion 38-39.
 52. de Jong IJ, Pruijm J, Elsinga PH, *et al.* Visualization of prostate cancer with 11C-choline positron emission tomography. *Eur Urol* 2002;42:18-23.
 53. Picchio M, Landoni C, Messa C, *et al.* Positive [11C]choline and negative [18F]FDG with positron emission tomography in recurrence of prostate cancer. *AJR Am J Roentgenol* 2002;179:482-484.
 54. Picchio M, Messa C, Landoni C, *et al.* Value of [11C]choline-positron emission tomography for re-staging prostate cancer: a comparison with [18F]fluorodeoxyglucose-positron emission tomography. *J Urol* 2003;169:1337-1340.
 55. Bubolz T, Wasson JH, Lu-Yao G, *et al.* Treatments for prostate cancer in older men: 1984-1997. *Urology* 2001;58:977-982.
 56. Gerber GS, Thisted RA, Scardino PT, *et al.* Results of radical prostatectomy in men with clinically localized prostate cancer. *Jama* 1996;276:615-619.
 57. Han M, Partin AW, Pound CR, *et al.* Long-term biochemical disease-free and cancer-specific survival following anatomic radical retropubic prostatectomy. The 15-year Johns Hopkins experience. *Urol Clin North Am* 2001;28:555-565.
 58. Hull GW, Rabbani F, Abbas F, *et al.* Cancer control with radical prostatectomy alone in 1,000 consecutive patients. *J Urol* 2002;167:528-534.
 59. Zincke H, Oesterling JE, Blute ML, *et al.* Long-term (15 years) results after radical prostatectomy for clinically localized (stage T2c or lower) prostate cancer. *J Urol* 1994;152:1850-1857.
 60. Catalona WJ, Smith DS. Cancer recurrence and survival rates after anatomic radical retropubic prostatectomy for prostate cancer: intermediate-term results. *J Urol* 1998;160:2428-2434.
 61. Eastham JA, Scardino PT. Radical prostatectomy. In: Walsh PC, Gittes RF, Perlmutter AD, *et al.*, editors. *Campbell's Urology*. Philadelphia: WB Saunders Company; 1996.
 62. Fowler FJ, Jr., Barry MJ, Lu-Yao G, *et al.* Patient-reported complications and follow-up treatment after radical prostatectomy. The National Medicare Experience: 1988-1990 (updated June 1993). *Urology* 1993;42:622-629.
 63. Walsh PC. Patient-reported urinary continence and sexual function after anatomic radical prostatectomy. *J Urol* 2000;164:242.
 64. Walsh PC, Marschke P, Ricker D, *et al.* Patient-reported urinary continence and sexual function after anatomic radical prostatectomy. *Urology* 2000;55:58-61.
 65. Rabbani F, Stapleton AM, Kattan MW, *et al.* Factors predicting recovery of erections after radical prostatectomy. *J Urol* 2000;164:1929-1934.
 66. Quinlan DM, Epstein JI, Carter BS, *et al.* Sexual function following radical prostatectomy: influence of preservation of neurovascular bundles. *J Urol* 1991;145:998-1002.

67. Catalona WJ, Carvalhal GF, Mager DE, *et al.* Potency, continence and complication rates in 1,870 consecutive radical retropubic prostatectomies. *J Urol* 1999;162:433-438.
68. Consensus statement: guidelines for PSA following radiation therapy. American Society for Therapeutic Radiology and Oncology Consensus Panel. *Int J Radiat Oncol Biol Phys* 1997;37:1035-1041.
69. Horwitz EM, Vicini FA, Ziaja EL, *et al.* The correlation between the ASTRO Consensus Panel definition of biochemical failure and clinical outcome for patients with prostate cancer treated with external beam irradiation. American Society of Therapeutic Radiology and Oncology. *Int J Radiat Oncol Biol Phys* 1998;41:267-272.
70. Hanlon AL, Hanks GE. Scrutiny of the ASTRO consensus definition of biochemical failure in irradiated prostate cancer patients demonstrates its usefulness and robustness. American Society for Therapeutic Radiology and Oncology. *Int J Radiat Oncol Biol Phys* 2000;46:559-566.
71. Lawton CA, Desilvio M, Lee WR, *et al.* Results of a phase II trial of transrectal ultrasound-guided permanent radioactive implantation of the prostate for definitive management of localized adenocarcinoma of the prostate (Radiation Therapy Oncology Group 98-05). *Int J Radiat Oncol Biol Phys* 2007;67:39-47.
72. Roach M, 3rd, Hanks G, Thames H, Jr., *et al.* Defining biochemical failure following radiotherapy with or without hormonal therapy in men with clinically localized prostate cancer: recommendations of the RTOG-ASTRO Phoenix Consensus Conference. *Int J Radiat Oncol Biol Phys* 2006;65:965-974.
73. Perez CA, Hanks GE, Leibel SA, *et al.* Localized carcinoma of the prostate (stages T1B, T1C, T2, and T3). Review of management with external beam radiation therapy. *Cancer* 1993;72:3156-3173.
74. Greco C, Zelefsky MJ. Radiotherapy for prostate cancer. Amsterdam: Harwood Academic Publishers; 2000.
75. Bagshaw MA, Kaplan ID, Cox RC. Prostate cancer. Radiation therapy for localized disease. *Cancer* 1993;71:939-952.
76. Zietman AL, Coen JJ, Dallow KC, *et al.* The treatment of prostate cancer by conventional radiation therapy: an analysis of long-term outcome. *Int J Radiat Oncol Biol Phys* 1995;32:287-292.
77. Kuban DA, el-Mahdi AM, Schellhammer PF. Prostate-specific antigen for pretreatment prediction and posttreatment evaluation of outcome after definitive irradiation for prostate cancer. *Int J Radiat Oncol Biol Phys* 1995;32:307-316.
78. Hanks GE, Hanlon AL, Epstein B, *et al.* Dose response in prostate cancer with 8-12 years' follow-up. *Int J Radiat Oncol Biol Phys* 2002;54:427-435.
79. Pollack A, Hanlon AL, Horwitz EM, *et al.* Prostate cancer radiotherapy dose response: an update of the fox chase experience. *J Urol* 2004;171:1132-1136.
80. Pollack A, Zagars GK, Smith LG, *et al.* Preliminary results of a randomized radiotherapy dose-escalation study comparing 70 Gy with 78 Gy for prostate cancer. *J Clin Oncol* 2000;18:3904-3911.
81. Pollack A, Zagars GK, Starkschall G, *et al.* Prostate cancer radiation dose response: results of the M. D. Anderson phase III randomized trial. *Int J Radiat Oncol Biol Phys* 2002;53:1097-1105.
82. Zelefsky MJ, Leibel SA, Gaudin PB, *et al.* Dose escalation with three-dimensional conformal radiation therapy affects the outcome in prostate cancer. *Int J Radiat Oncol Biol Phys* 1998;41:491-500.
83. Zelefsky MJ, Fuks Z, Hunt M, *et al.* High dose radiation delivered by intensity modulated conformal radiotherapy improves the outcome of localized prostate cancer. *J Urol* 2001;166:876-881.
84. Zelefsky MJ, Fuks Z, Hunt M, *et al.* High-dose intensity modulated radiation therapy for prostate cancer: early toxicity and biochemical outcome in 772 patients. *Int J Radiat Oncol Biol Phys* 2002;53:1111-1116.
85. Kupelian PA, Mohan DS, Lyons J, *et al.* Higher than standard radiation doses (> or =72 Gy) with or without androgen deprivation in the treatment of localized prostate cancer.

- Int J Radiat Oncol Biol Phys* 2000;46:567-574.
86. Valicenti R, Lu J, Pilepich M, *et al.* Survival advantage from higher-dose radiation therapy for clinically localized prostate cancer treated on the Radiation Therapy Oncology Group trials. *J Clin Oncol* 2000;18:2740-2746.
 87. Bey P, Carrie C, Beckendorf V, *et al.* Dose escalation with 3D-CRT in prostate cancer: French study of dose escalation with conformal 3D radiotherapy in prostate cancer—preliminary results. *Int J Radiat Oncol Biol Phys* 2000;48:513-517.
 88. Symon Z, Griffith KA, McLaughlin PW, *et al.* Dose escalation for localized prostate cancer: substantial benefit observed with 3D conformal therapy. *Int J Radiat Oncol Biol Phys* 2003;57:384-390.
 89. Kuban DA, Thames HD, Levy LB, *et al.* Long-term multi-institutional analysis of stage T1-T2 prostate cancer treated with radiotherapy in the PSA era. *Int J Radiat Oncol Biol Phys* 2003;57:915-928.
 90. Hurwitz MD, Schnieder L, Manola J, *et al.* Lack of radiation dose response for patients with low-risk clinically localized prostate cancer: a retrospective analysis. *Int J Radiat Oncol Biol Phys* 2002;53:1106-1110.
 91. Kupelian PA, Buchsbaum JC, Reddy CA, *et al.* Radiation dose response in patients with favorable localized prostate cancer (Stage T1-T2, biopsy Gleason < or = 6, and pretreatment prostate-specific antigen < or = 10). *Int J Radiat Oncol Biol Phys* 2001;50:621-625.
 92. Aronowitz JN. Dawn of prostate brachytherapy: 1915-1930. *Int J Radiat Oncol Biol Phys* 2002;54:712-718.
 93. Pasteau O, Degrais P. De l'emploi du radium dans le traitement des cancers de la prostate. *Journal d'urologie Medicale et Chirurgicale* 1913:341-366.
 94. Young HH. The use of radium in cancer of the prostate and bladder: a presentation of new instruments and new methods of use. *JAMA* 1917:1174-1177.
 95. Young HH. Technique of radium treatment of cancer of the prostate and seminal vesicles. *Surg Gynecol Obstet* 1922;34:93-98.
 96. Young HH. Treatment of carcinoma of the prostate. In: Young HH, Davis DM, editors. *Young's practice of Urology: based on a study of 12500 cases.* Philadelphia: WB Saunders; 1926. pp. 644-671.
 97. Young HH, Waters CA. Deep roentgen-ray and radium therapy in malignant disease of the genitourinary tract. *Am J Surg* 1927;2:101-125.
 98. Barringer BS. Radium in the treatment of carcinoma of the prostate and bladder. *JAMA* 1916;67:1442-1445.
 99. Barringer BS. Radium in the treatment of carcinoma of the bladder and prostate: Review of one year's work. *JAMA* 1917;68:1227-1230.
 100. Barringer BS. Radium in the treatment of prostatic carcinoma. *Ann Surg* 1924;8:881-884.
 101. Flocks RH, Kerr HD, Elkins HB, *et al.* Treatment of carcinoma of the prostate by interstitial radiation with radio-active gold (Au 198): a preliminary report. *J Urol* 1952;68:510-522.
 102. Flocks RH, Kerr HD, Elkins HB, *et al.* The treatment of carcinoma of the prostate by interstitial radiation with radioactive gold (Au198); a follow-up report. *J Urol* 1954;71:628-633.
 103. Whitmore WF, Jr., Hilaris B, Grabstald H. Retropubic implantation to iodine 125 in the treatment of prostatic cancer. *J Urol* 1972;108:918-920.
 104. Hilaris BS, Whitmore WF, Batata M, *et al.* Behavioral patterns of prostate adenocarcinoma following an 125I implant and pelvic node dissection. *Int J Radiat Oncol Biol Phys* 1977;2:631-637.
 105. Zelefsky MJ, Whitmore WF, Jr. Long-term results of retropubic permanent 125iodine implantation of the prostate for clinically localized prostatic cancer. *J Urol* 1997;158:23-29; discussion 29-30.
 106. Holm HH. The history of interstitial brachytherapy of prostatic cancer. *Semin Surg Oncol* 1997;13:431-437.
 107. Fornage BD, Touche DH, Deglaire M, *et al.* Real-time ultrasound-guided prostatic biopsy using a new transrectal linear-array probe. *Radiology* 1983;146:547-548.

108. Holm HH, Juul N, Pedersen JF, *et al.* Transperineal 125iodine seed implantation in prostatic cancer guided by transrectal ultrasonography. *J Urol* 1983;130:283-286.
109. Blasko JC, Ragde H, Luse RW, *et al.* Should brachytherapy be considered a therapeutic option in localized prostate cancer? *Urol Clin North Am* 1996;23:633-650.
110. Ragde H, Korb LJ, Elgamal AA, *et al.* Modern prostate brachytherapy. Prostate specific antigen results in 219 patients with up to 12 years of observed follow-up. *Cancer* 2000;89:135-141.
111. Mettlin CJ, Murphy GP, McDonald CJ, *et al.* The National Cancer Data base Report on increased use of brachytherapy for the treatment of patients with prostate carcinoma in the U.S. *Cancer* 1999;86:1877-1882.
112. Brandeis J, Pashos CL, Henning JM, *et al.* A nationwide charge comparison of the principal treatments for early stage prostate carcinoma. *Cancer* 2000;89:1792-1799.
113. Lee WR, Moughan J, Owen JB, *et al.* The 1999 patterns of care study of radiotherapy in localized prostate carcinoma: a comprehensive survey of prostate brachytherapy in the United States. *Cancer* 2003;98:1987-1994.
114. Bice WS, Prestidge BR. A review of postimplant quality assessment in permanent transperineal interstitial prostate brachytherapy. *J Brachyther Int* 1997;13:297-313.
115. Prestidge BR, Prete JJ, Buchholz TA, *et al.* A survey of current clinical practice of permanent prostate brachytherapy in the United States. *Int J Radiat Oncol Biol Phys* 1998;40:461-465.
116. Prete JJ, Prestidge BR, Bice WS, *et al.* A survey of physics and dosimetry practice of permanent prostate brachytherapy in the United States. *Int J Radiat Oncol Biol Phys* 1998;40:1001-1005.
117. Nag S, Baird M, Blasko J, *et al.* American Brachytherapy Society (ABS) survey of current clinical practice for permanent brachytherapy of prostate cancer. *J Brachyther Int* 1997;13:243-251.
118. Nag S, Beyer D, Friedland J, *et al.* American Brachytherapy Society (ABS) recommendations for transperineal permanent brachytherapy of prostate cancer. *Int J Radiat Oncol Biol Phys* 1999;44:789-799.
119. Ash D, Flynn A, Battermann J, *et al.* ESTRO/EAU/EORTC recommendations on permanent seed implantation for localized prostate cancer. *Radiother Oncol* 2000;57:315-321.
120. Bastacky SI, Walsh PC, Epstein JI. Relationship between perineural tumor invasion on needle biopsy and radical prostatectomy capsular penetration in clinical stage B adenocarcinoma of the prostate. *Am J Surg Pathol* 1993;17:336-341.
121. Merrick GS, Butler WM, Wallner KE, *et al.* Prognostic significance of perineural invasion on biochemical progression-free survival after prostate brachytherapy. *Urology* 2005;66:1048-1053.
122. D'Amico AV, Schultz D, Silver B, *et al.* The clinical utility of the percent of positive prostate biopsies in predicting biochemical outcome following external-beam radiation therapy for patients with clinically localized prostate cancer. *Int J Radiat Oncol Biol Phys* 2001;49:679-684.
123. D'Amico AV, Whittington R, Malkowicz SB, *et al.* Clinical utility of the percentage of positive prostate biopsies in defining biochemical outcome after radical prostatectomy for patients with clinically localized prostate cancer. *J Clin Oncol* 2000;18:1164-1172.
124. D'Amico AV, Keshaviah A, Manola J, *et al.* Clinical utility of the percentage of positive prostate biopsies in predicting prostate cancer-specific and overall survival after radiotherapy for patients with localized prostate cancer. *Int J Radiat Oncol Biol Phys* 2002;53:581-587.
125. Merrick GS, Butler WM, Wallner KE, *et al.* Prognostic significance of percent positive biopsies in clinically organ-confined prostate cancer treated with permanent prostate brachytherapy with or without supplemental external-beam radiation. *Cancer J* 2004;10:54-60.
126. Rossi PJ, Clark PE, Papagikos MA, *et al.* Percentage of positive biopsies associated with freedom from biochemical recurrence after low-dose-rate prostate brachytherapy alone for clinically localized prostate cancer. *Urology* 2006;67:349-353.
127. Martens C, Pond G, Webster D, *et al.* Relationship of the International Prostate Symptom

- score with urinary flow studies, and catheterization rates following 125I prostate brachytherapy. *Brachytherapy* 2006;5:9-13.
128. Henderson A, Cahill D, Laing RW, *et al.* (125I)Iodine prostate brachytherapy: outcome from the first 100 consecutive patients and selection strategies incorporating urodynamics. *BJU Int* 2002;90:567-572.
 129. Sherertz T, Wallner K, Wang H, *et al.* Long-term urinary function after transperineal brachytherapy for patients with large prostate glands. *Int J Radiat Oncol Biol Phys* 2001;51:1241-1245.
 130. Merrick GS, Butler WM, Lief JH, *et al.* Temporal resolution of urinary morbidity following prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;47:121-128.
 131. Merrick GS, Butler WM, Wallner KE, *et al.* Long-term urinary quality of life after permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2003;56:454-461.
 132. Merrick GS, Butler WM, Wallner KE, *et al.* The impact of prostate volume and neoadjuvant androgen-deprivation therapy on urinary function following prostate brachytherapy. *Cancer J* 2004;10:181-189.
 133. Niehaus A, Merrick GS, Butler WM, *et al.* The influence of isotope and prostate volume on urinary morbidity after prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2006;64:136-143.
 134. Stone NN, Stock RG. Prostate brachytherapy in patients with prostate volumes \geq 50 cm³: dosimetric analysis of implant quality. *Int J Radiat Oncol Biol Phys* 2000;46:1199-1204.
 135. Grimm PD, Blasko JC, Ragde H, *et al.* Does brachytherapy have a role in the treatment of prostate cancer? *Hematol Oncol Clin North Am* 1996;10:653-673.
 136. Wallner K, Lee H, Wasserman S, *et al.* Low risk of urinary incontinence following prostate brachytherapy in patients with a prior transurethral prostate resection. *Int J Radiat Oncol Biol Phys* 1997;37:565-569.
 137. Cesaretti JA, Stone NN, Stock RG. Does prior transurethral resection of prostate compromise brachytherapy quality: a dosimetric analysis. *Int J Radiat Oncol Biol Phys* 2004;60:648-653.
 138. Cormack RA, Tempany CM, D'Amico AV. Optimizing target coverage by dosimetric feedback during prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;48:1245-1249.
 139. Wilkinson DA, Lee EJ, Ciezki JP, *et al.* Dosimetric comparison of pre-planned and or-planned prostate seed brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;48:1241-1244.
 140. Nag S, Bice W, DeWyngaert K, *et al.* The American Brachytherapy Society recommendations for permanent prostate brachytherapy postimplant dosimetric analysis. *Int J Radiat Oncol Biol Phys* 2000;46:221-230.
 141. Gewanter RM, Wu C, Laguna JL, *et al.* Intraoperative preplanning for transperineal ultrasound-guided permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;48:377-380.
 142. Zelefsky MJ, Yamada Y, Cohen G, *et al.* Postimplantation dosimetric analysis of permanent transperineal prostate implantation: improved dose distributions with an intraoperative computer-optimized conformal planning technique. *Int J Radiat Oncol Biol Phys* 2000;48:601-608.
 143. Yu Y, Zhang JB, Brasacchio RA, *et al.* Automated treatment planning engine for prostate seed implant brachytherapy. *Int J Radiat Oncol Biol Phys* 1999;43:647-652.
 144. Zaider M, Zelefsky MJ, Lee EK, *et al.* Treatment planning for prostate implants using magnetic-resonance spectroscopy imaging. *Int J Radiat Oncol Biol Phys* 2000;47:1085-1096.
 145. D'Amico AV, Cormack R, Tempany CM, *et al.* Real-time magnetic resonance image-guided interstitial brachytherapy in the treatment of select patients with clinically localized prostate cancer. *Int J Radiat Oncol Biol Phys* 1998;42:507-515.
 146. Messing EM, Zhang JB, Rubens DJ, *et al.* Intraoperative optimized inverse planning for prostate brachytherapy: early experience. *Int J Radiat Oncol Biol Phys* 1999;44:801-808.

147. Stone NN, Hong S, Lo YC, *et al.* Comparison of intraoperative dosimetric implant representation with postimplant dosimetry in patients receiving prostate brachytherapy. *Brachytherapy* 2003;2:17-25.
148. Ragde H, Grado GL, Nadir B, *et al.* Modern prostate brachytherapy. *CA Cancer J Clin* 2000;50:380-393.
149. Stock RG, Stone NN. The effect of prognostic factors on therapeutic outcome following transperineal prostate brachytherapy. *Semin Surg Oncol* 1997;13:454-460.
150. D'Amico AV, Whittington R, Malkowicz SB, *et al.* Biochemical outcome after radical prostatectomy, external beam radiation therapy, or interstitial radiation therapy for clinically localized prostate cancer. *Jama* 1998;280:969-974.
151. Ragde H, Elgamal AA, Snow PB, *et al.* Ten-year disease free survival after transperineal sonography-guided iodine-125 brachytherapy with or without 45-gray external beam irradiation in the treatment of patients with clinically localized, low to high Gleason grade prostate carcinoma. *Cancer* 1998;83:989-1001.
152. Blasko JC, Grimm PD, Sylsvester JE, *et al.* The role of external beam radiotherapy with I-125/Pd-103 brachytherapy for prostate carcinoma. *Radiother Oncol* 2000;57:273-278.
153. Cavanagh W, Blasko JC, Grimm PD, *et al.* Transient elevation of serum prostate-specific antigen following (125)I/(103)Pd brachytherapy for localized prostate cancer. *Semin Urol Oncol* 2000;18:160-165.
154. Kollmeier MA, Stock RG, Stone N. Biochemical outcomes after prostate brachytherapy with 5-year minimal follow-up: importance of patient selection and implant quality. *Int J Radiat Oncol Biol Phys* 2003;57:645-653.
155. Zelefsky MJ, Hollister T, Raben A, *et al.* Five-year biochemical outcome and toxicity with transperineal CT-planned permanent I-125 prostate implantation for patients with localized prostate cancer. *Int J Radiat Oncol Biol Phys* 2000;47:1261-1266.
156. Sharkey J, Chovnick SD, Behar RJ, *et al.* Outpatient ultrasound-guided palladium 103 brachytherapy for localized adenocarcinoma of the prostate: a preliminary report of 434 patients. *Urology* 1998;51:796-803.
157. Kaye KW, Olson DJ, Payne JT. Detailed preliminary analysis of 125iodine implantation for localized prostate cancer using percutaneous approach. *J Urol* 1995;153:1020-1025.
158. Battermann JJ. I-125 implantation for localized prostate cancer: the Utrecht University experience. *Radiother Oncol* 2000;57:269-272.
159. Beyer DC, Priestley JB, Jr. Biochemical disease-free survival following 125I prostate implantation. *Int J Radiat Oncol Biol Phys* 1997;37:559-563.
160. Wallner K, Roy J, Harrison L. Tumor control and morbidity following transperineal iodine 125 implantation for stage T1/T2 prostatic carcinoma. *J Clin Oncol* 1996;14:449-453.
161. Blasko JC, Wallner K, Grimm PD, *et al.* Prostate specific antigen based disease control following ultrasound guided 125iodine implantation for stage T1/T2 prostatic carcinoma. *J Urol* 1995;154:1096-1099.
162. Grado GL, Larson TR, Balch CS, *et al.* Actuarial disease-free survival after prostate cancer brachytherapy using interactive techniques with biplane ultrasound and fluoroscopic guidance. *Int J Radiat Oncol Biol Phys* 1998;42:289-298.
163. Merrick GS, Butler WM, Lief JH, *et al.* Five-year biochemical outcome after prostate brachytherapy for hormone-naïve men < or = 62 years of age. *Int J Radiat Oncol Biol Phys* 2001;50:1253-1257.
164. Storey MR, Landgren RC, Cottone JL, *et al.* Transperineal 125iodine implantation for treatment of clinically localized prostate cancer: 5-year tumor control and morbidity. *Int J Radiat Oncol Biol Phys* 1999;43:565-570.
165. Blank LE, Gonzalez Gonzalez D, de Reijke TM, *et al.* Brachytherapy with transperineal (125)Iodine seeds for localized prostate cancer. *Radiother Oncol* 2000;57:307-313.
166. Zelefsky MJ, Kuban DA, Levy LB, *et al.* Multi-institutional analysis of long-term outcome for stages T1-T2 prostate cancer treated with permanent seed implantation. *Int J Radiat Oncol Biol Phys* 2007;67:327-333.
167. Blasko JC, Grimm PD, Sylvester JE, *et al.* Palladium-103 brachytherapy for prostate

- carcinoma. *Int J Radiat Oncol Biol Phys* 2000;46:839-850.
168. Grimm PD, Blasko JC, Sylvester JE, *et al.* 10-year biochemical (prostate-specific antigen) control of prostate cancer with (125)I brachytherapy. *Int J Radiat Oncol Biol Phys* 2001;51:31-40.
 169. Ragde H, Grado GL, Nadir BS. Brachytherapy for clinically localized prostate cancer: thirteen-year disease-free survival of 769 consecutive prostate cancer patients treated with permanent implants alone. *Arch Esp Urol* 2001;54:739-747.
 170. Singh A, Zelefsky MJ, Raben A, *et al.* Combined 3-dimensional conformal radiotherapy and transperineal Pd-103 permanent implantation for patients with intermediate and unfavorable risk prostate cancer. *Int J Cancer* 2000;90:275-280.
 171. Dattoli M, Wallner K, Sorace R, *et al.* 103Pd brachytherapy and external beam irradiation for clinically localized, high-risk prostatic carcinoma. *Int J Radiat Oncol Biol Phys* 1996;35:875-879.
 172. Lederman GS, Cavanagh W, Albert PS, *et al.* Retrospective stratification of a consecutive cohort of prostate cancer patients treated with a combined regimen of external-beam radiotherapy and brachytherapy. *Int J Radiat Oncol Biol Phys* 2001;49:1297-1303.
 173. Sylvester JE, Grimm PD, Blasko JC, *et al.* 15-Year biochemical relapse free survival in clinical Stage T1-T3 prostate cancer following combined external beam radiotherapy and brachytherapy; Seattle experience. *Int J Radiat Oncol Biol Phys* 2007;67:57-64.
 174. Talcott JA, Clark JA, Stark PC, *et al.* Long-term treatment related complications of brachytherapy for early prostate cancer: a survey of patients previously treated. *J Urol* 2001;166:494-499.
 175. Nag S, Scaperoth DD, Badalament R, *et al.* Transperineal palladium 103 prostate brachytherapy: analysis of morbidity and seed migration. *Urology* 1995;45:87-92.
 176. Gelblum DY, Potters L, Ashley R, *et al.* Urinary morbidity following ultrasound-guided transperineal prostate seed implantation. *Int J Radiat Oncol Biol Phys* 1999;45:59-67.
 177. Benoit RM, Naslund MJ, Cohen JK. Complications after prostate brachytherapy in the Medicare population. *Urology* 2000;55:91-96.
 178. Zeitlin SI, Sherman J, Raboy A, *et al.* High dose combination radiotherapy for the treatment of localized prostate cancer. *J Urol* 1998;160:91-95; discussion 95-96.
 179. Stone NN, Stock RG. Prostate brachytherapy: treatment strategies. *J Urol* 1999;162:421-426.
 180. Ragde H, Korb L. Brachytherapy for clinically localized prostate cancer. *Semin Surg Oncol* 2000;18:45-51.
 181. Terk MD, Stock RG, Stone NN. Identification of patients at increased risk for prolonged urinary retention following radioactive seed implantation of the prostate. *J Urol* 1998;160:1379-1382.
 182. McElveen TL, Waterman FM, Kim H, *et al.* Factors predicting for urinary incontinence after prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2004;59:1395-1404.
 183. Bucci J, Morris WJ, Keyes M, *et al.* Predictive factors of urinary retention following prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2002;53:91-98.
 184. Wallner K, Roy J, Harrison L. Dosimetry guidelines to minimize urethral and rectal morbidity following transperineal I-125 prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1995;32:465-471.
 185. Desai J, Stock RG, Stone NN, *et al.* Acute urinary morbidity following I-125 interstitial implantation of the prostate gland. *Radiat Oncol Investig* 1998;6:135-141.
 186. Keyes M, Schellenberg D, Moravan V, *et al.* Decline in urinary retention incidence in 805 patients after prostate brachytherapy: the effect of learning curve? *Int J Radiat Oncol Biol Phys* 2006;64:825-834.
 187. Vijverberg PL, Kurth KH, Blank LE, *et al.* Treatment of localized prostatic carcinoma using the transrectal ultrasound guided transperineal implantation technique. *Eur Urol* 1992;21:35-41.
 188. Blasko JC, Ragde H, Grimm PD. Transperineal ultrasound-guided implantation of the prostate: morbidity and complications. *Scand J Urol Nephrol Suppl* 1991;137:113-118.
 189. Lee N, Wu CS, Brody R, *et al.* Factors predicting for postimplantation urinary retention

- after permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;48:1457-1460.
190. Thomas MD, Cormack R, Tempany CM, *et al.* Identifying the predictors of acute urinary retention following magnetic-resonance-guided prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2000;47:905-908.
 191. Merrick GS, Butler WM, Dorsey AT, *et al.* Influence of prophylactic dexamethasone on edema following prostate brachytherapy. *Tech Urol* 2000;6:117-122.
 192. Speight JL, Shinohara K, Pickett B, *et al.* Prostate volume change after radioactive seed implantation: possible benefit of improved dose volume histogram with perioperative steroid. *Int J Radiat Oncol Biol Phys* 2000;48:1461-1467.
 193. Ragde H, Blasko JC, Grimm PD, *et al.* Interstitial iodine-125 radiation without adjuvant therapy in the treatment of clinically localized prostate carcinoma. *Cancer* 1997;80:442-453.
 194. Zelefsky MJ, Wallner KE, Ling CC, *et al.* Comparison of the 5-year outcome and morbidity of three-dimensional conformal radiotherapy versus transperineal permanent iodine-125 implantation for early-stage prostatic cancer. *J Clin Oncol* 1999;17:517-522.
 195. Merrick GS, Butler WM, Tollenaar BG, *et al.* The dosimetry of prostate brachytherapy-induced urethral strictures. *Int J Radiat Oncol Biol Phys* 2002;52:461-468.
 196. Stock RG, Stone NN, DeWyngaert JK, *et al.* Prostate specific antigen findings and biopsy results following interactive ultrasound guided transperineal brachytherapy for early stage prostate carcinoma. *Cancer* 1996;77:2386-2392.
 197. Kleinberg L, Wallner K, Roy J, *et al.* Treatment-related symptoms during the first year following transperineal 125I prostate implantation. *Int J Radiat Oncol Biol Phys* 1994;28:985-990.
 198. Lepor H, Gregerman M, Crosby R, *et al.* Precise localization of the autonomic nerves from the pelvic plexus to the corpora cavernosa: a detailed anatomical study of the adult male pelvis. *J Urol* 1985;133:207-212.
 199. Merrick GS, Butler WM, Dorsey AT, *et al.* A comparison of radiation dose to the neurovascular bundles in men with and without prostate brachytherapy-induced erectile dysfunction. *Int J Radiat Oncol Biol Phys* 2000;48:1069-1074.
 200. Merrick GS, Wallner K, Butler WM, *et al.* A comparison of radiation dose to the bulb of the penis in men with and without prostate brachytherapy-induced erectile dysfunction. *Int J Radiat Oncol Biol Phys* 2001;50:597-604.
 201. Fisch BM, Pickett B, Weinberg V, *et al.* Dose of radiation received by the bulb of the penis correlates with risk of impotence after three-dimensional conformal radiotherapy for prostate cancer. *Urology* 2001;57:955-959.
 202. Litwin MS, Lubeck DP, Henning JM, *et al.* Differences in urologist and patient assessments of health related quality of life in men with prostate cancer: results of the CaPSURE database. *J Urol* 1998;159:1988-1992.
 203. Merrick GS, Butler WM, Galbreath RW, *et al.* Erectile function after permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2002;52:893-902.
 204. Stock RG, Kao J, Stone NN. Penile erectile function after permanent radioactive seed implantation for treatment of prostate cancer. *J Urol* 2001;165:436-439.
 205. Zelefsky MJ, McKee AB, Lee H, *et al.* Efficacy of oral sildenafil in patients with erectile dysfunction after radiotherapy for carcinoma of the prostate. *Urology* 1999;53:775-778.
 206. Hanks GE, Schultheiss TE, Hanlon AL, *et al.* Optimization of conformal radiation treatment of prostate cancer: report of a dose escalation study. *Int J Radiat Oncol Biol Phys* 1997;37:543-550.
 207. Zelefsky MJ, Cowen D, Fuks Z, *et al.* Long term tolerance of high dose three-dimensional conformal radiotherapy in patients with localized prostate carcinoma. *Cancer* 1999;85:2460-2468.
 208. Skwarchuk MW, Jackson A, Zelefsky MJ, *et al.* Late rectal toxicity after conformal radiotherapy of prostate cancer (I): multivariate analysis and dose-response. *Int J Radiat Oncol Biol Phys* 2000;47:103-113.

209. Boersma LJ, van den Brink M, Bruce AM, *et al.* Estimation of the incidence of late bladder and rectum complications after high-dose (70-78 Gy) conformal radiotherapy for prostate cancer, using dose-volume histograms. *Int J Radiat Oncol Biol Phys* 1998;41:83-92.
210. Hartford AC, Niemierko A, Adams JA, *et al.* Conformal irradiation of the prostate: estimating long-term rectal bleeding risk using dose-volume histograms. *Int J Radiat Oncol Biol Phys* 1996;36:721-730.
211. Merrick GS, Butler WM, Dorsey AT, *et al.* Rectal dosimetric analysis following prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1999;43:1021-1027.
212. Snyder KM, Stock RG, Hong SM, *et al.* Defining the risk of developing grade 2 proctitis following 125I prostate brachytherapy using a rectal dose-volume histogram analysis. *Int J Radiat Oncol Biol Phys* 2001;50:335-341.
213. Hilaris BS, Whitmore WF, Jr., Batata MA, *et al.* Radiation therapy and pelvic node dissection in the management of cancer of the prostate. *Am J Roentgenol Radium Ther Nucl Med* 1974;121:832-838.
214. Anderson LL. Spacing nomograph for interstitial implants of 125I seeds. *Med Phys* 1976;3:48-51.
215. Yu Y, Anderson LL, Li Z, *et al.* Permanent prostate seed implant brachytherapy: report of the American Association of Physicists in Medicine Task Group No. 64. *Med Phys* 1999;26:2054-2076.
216. Nath R, Anderson LL, Luxton G, *et al.* Dosimetry of interstitial brachytherapy sources: recommendations of the AAPM Radiation Therapy Committee Task Group No. 43. American Association of Physicists in Medicine. *Med Phys* 1995;22:209-234.
217. Kubo HD, Coursey BM, Hanson WF, *et al.* Report of the ad hoc committee of the AAPM radiation therapy committee on 125I sealed source dosimetry. *Int J Radiat Oncol Biol Phys* 1998;40:697-702.
218. Ling CC, Yorke ED, Spiro IJ, *et al.* Physical dosimetry of 125I seeds of a new design for interstitial implant. *Int J Radiat Oncol Biol Phys* 1983;9:1747-1752.
219. Roy JN, Wallner KE, Harrington PJ, *et al.* A CT-based evaluation method for permanent implants: application to prostate. *Int J Radiat Oncol Biol Phys* 1993;26:163-169.
220. Willins J, Wallner K. CT-based dosimetry for transperineal I-125 prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1997;39:347-353.
221. Yu Y, Waterman FM, Suntharalingam N, *et al.* Limitations of the minimum peripheral dose as a parameter for dose specification in permanent 125I prostate implants. *Int J Radiat Oncol Biol Phys* 1996;34:717-725.
222. Potters L, Calguar E, Thornton KB, *et al.* Toward a dynamic real-time intraoperative permanent prostate brachytherapy methodology. *Brachytherapy* 2003;2:172-180.
223. Potters L, Calugar E, Jassal A, *et al.* Is there a role for postimplant dosimetry after real-time dynamic permanent prostate brachytherapy? *Int J Radiat Oncol Biol Phys* 2006;65:1014-1019.
224. Acher P, Popert R, Nichol J, *et al.* Permanent prostate brachytherapy: Dosimetric results and analysis of a learning curve with a dynamic dose-feedback technique. *Int J Radiat Oncol Biol Phys* 2006;65:694-698.
225. Zelefsky MJ, Zaider M. Low-dose-rate brachytherapy for prostate cancer: preplanning vs. intraoperative planning-intraoperative planning is best. *Brachytherapy* 2006;5:143-144; discussion 146.
226. Zaider M, Zelefsky MJ, Cohen GN, *et al.* Methodology for biologically-based treatment planning for combined low-dose-rate (permanent implant) and high-dose-rate (fractionated) treatment of prostate cancer. *Int J Radiat Oncol Biol Phys* 2005;61:702-713.
227. Todor DA, Zaider M, Cohen GN, *et al.* Intraoperative dynamic dosimetry for prostate implants. *Phys Med Biol* 2003;48:1153-1171.
228. Anderson LL. A "natural" volume-dose histogram for brachytherapy. *Med Phys* 1986;13:898-903.
229. van't Riet A, te Loo HJ, Ypma AF, *et al.* Ultrasonically guided transperineal seed implantation of the prostate: modification of the technique and qualitative assessment

- of implants. *Int J Radiat Oncol Biol Phys* 1992;24:555-558.
230. Yu Y. A nondivergent specification of the mean treatment dose in interstitial brachytherapy. *Med Phys* 1996;23:905-909.
231. Nath R, Meigooni AS, Melillo A. Some treatment planning considerations for 103Pd and 125I permanent interstitial implants. *Int J Radiat Oncol Biol Phys* 1992;22:1131-1138.
232. Nath R, Roberts K, Ng M, et al. Correlation of medical dosimetry quality indicators to the local tumor control in patients with prostate cancer treated with iodine-125 interstitial implants. *Med Phys* 1998;25:2293-2307.
233. Saw CB, Suntharalingam N. Quantitative assessment of interstitial implants. *Int J Radiat Oncol Biol Phys* 1991;20:135-139.
234. Dubois DF, Prestidge BR, Hotchkiss LA, et al. Intraobserver and interobserver variability of MR imaging- and CT-derived prostate volumes after transperineal interstitial permanent prostate brachytherapy. *Radiology* 1998;207:785-789.
235. Dubois DF, Prestidge BR, Hotchkiss LA, et al. Source localization following permanent transperineal prostate interstitial brachytherapy using magnetic resonance imaging. *Int J Radiat Oncol Biol Phys* 1997;39:1037-1041.
236. Moerland MA, Wijrdeman HK, Beersma R, et al. Evaluation of permanent I-125 prostate implants using radiography and magnetic resonance imaging. *Int J Radiat Oncol Biol Phys* 1997;37:927-933.
237. Xue J, Waterman F, Handler J, et al. Localization of linked 125I seeds in postimplant TRUS images for prostate brachytherapy dosimetry. *Int J Radiat Oncol Biol Phys* 2005;62:912-919.
238. Narayana V, Roberson PL, Pu AT, et al. Impact of differences in ultrasound and computed tomography volumes on treatment planning of permanent prostate implants. *Int J Radiat Oncol Biol Phys* 1997;37:1181-1185.
239. Narayana V, Roberson PL, Winfield RJ, et al. Impact of ultrasound and computed tomography prostate volume registration on evaluation of permanent prostate implants. *Int J Radiat Oncol Biol Phys* 1997;39:341-346.
240. Dubois DF, Bice WS, Jr., Prestige BR. CT and MRI derived source localization error in a custom prostate phantom using automated image coregistration. *Med Phys* 2001;28:2280-2284.
241. Amdur RJ, Gladstone D, Leopold KA, et al. Prostate seed implant quality assessment using MR and CT image fusion. *Int J Radiat Oncol Biol Phys* 1999;43:67-72.
242. Polo A, Cattani F, Vavassori A, et al. MR and CT image fusion for postimplant analysis in permanent prostate seed implants. *Int J Radiat Oncol Biol Phys* 2004;60:1572-1579.
243. Badiozamani KR, Wallner K, Cavanagh W, et al. Comparability of CT-based and TRUS-based prostate volumes. *Int J Radiat Oncol Biol Phys* 1999;43:375-378.
244. Roach M, 3rd, Faillace-Akazawa P, Malfatti C, et al. Prostate volumes defined by magnetic resonance imaging and computerized tomographic scans for three-dimensional conformal radiotherapy. *Int J Radiat Oncol Biol Phys* 1996;35:1011-1018.
245. Rosen, II, Khan KM, Lane RG, et al. The effect of geometric errors in the reconstruction of iridium-192 seed implants. *Med Phys* 1982;9:220-223.
246. Al-Qaisieh B, Ash D, Bottomley DM, et al. Impact of prostate volume evaluation by different observers on CT-based post-implant dosimetry. *Radiother Oncol* 2002;62:267-273.
247. Lee WR, Roach M, 3rd, Michalski J, et al. Interobserver variability leads to significant differences in quantifiers of prostate implant adequacy. *Int J Radiat Oncol Biol Phys* 2002;54:457-461.
248. Cazzaniga LF, Marinoni MA, Bossi A, et al. Interphysician variability in defining the planning target volume in the irradiation of prostate and seminal vesicles. *Radiother Oncol* 1998;47:293-296.
249. Fiorino C, Reni M, Bolognesi A, et al. Intra- and inter-observer variability in contouring prostate and seminal vesicles: implications for conformal treatment planning. *Radiother Oncol* 1998;47:285-292.
250. Valicenti RK, Sweet JW, Hauck WW, et al. Variation of clinical target volume definition in three-dimensional conformal radiation therapy for prostate cancer. *Int J Radiat Oncol*

- Biol Phys* 1999;44:931-935.
251. Sandler HM, Bree RL, McLaughlin PW, *et al.* Localization of the prostatic apex for radiation therapy using implanted markers. *Int J Radiat Oncol Biol Phys* 1993;27:915-919.
 252. Kagawa K, Lee WR, Schultheiss TE, *et al.* Initial clinical assessment of CT-MRI image fusion software in localization of the prostate for 3D conformal radiation therapy. *Int J Radiat Oncol Biol Phys* 1997;38:319-325.
 253. Rasch C, Barillot I, Remeijer P, *et al.* Definition of the prostate in CT and MRI: a multi-observer study. *Int J Radiat Oncol Biol Phys* 1999;43:57-66.
 254. Merrick GS, Butler WM, Dorsey AT, *et al.* The dependence of prostate postimplant dosimetric quality on CT volume determination. *Int J Radiat Oncol Biol Phys* 1999;44:1111-1117.
 255. Lee WR, deGuzman AF, Bare RL, *et al.* Postimplant analysis of transperineal interstitial permanent prostate brachytherapy: evidence for a learning curve in the first year at a single institution. *Int J Radiat Oncol Biol Phys* 2000;46:83-88.
 256. Bice WS, Jr., Prestidge BR, Grimm PD, *et al.* Centralized multiinstitutional postimplant analysis for interstitial prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1998;41:921-927.
 257. Hricak H, Jeffrey RB, Dooms GC, *et al.* Evaluation of prostate size: a comparison of ultrasound and magnetic resonance imaging. *Urol Radiol* 1987;9:1-8.
 258. Rahmouni A, Yang A, Tempany CM, *et al.* Accuracy of in-vivo assessment of prostatic volume by MRI and transrectal ultrasonography. *J Comput Assist Tomogr* 1992;16:935-940.
 259. al-Rimawi M, Griffiths DJ, Boake RC, *et al.* Transrectal ultrasound versus magnetic resonance imaging in the estimation of prostatic volume. *Br J Urol* 1994;74:596-600.
 260. Tewari A, Indudhara R, Shinohara K, *et al.* Comparison of transrectal ultrasound prostatic volume estimation with magnetic resonance imaging volume estimation and surgical specimen weight in patients with benign prostatic hyperplasia. *J Clin Ultrasound* 1996;24:169-174.
 261. Terris MK, Stamey TA. Determination of prostate volume by transrectal ultrasound. *J Urol* 1991;145:984-987.
 262. Terris MK, McNeal JE, Stamey TA. Estimation of prostate cancer volume by transrectal ultrasound imaging. *J Urol* 1992;147:855-857.
 263. Sosna J, Rofsky NM, Gaston SM, *et al.* Determinations of prostate volume at 3-Tesla using an external phased array coil: comparison to pathologic specimens. *Acad Radiol* 2003;10:846-853.
 264. Prete JJ, Prestidge BR, Bice WS, *et al.* Comparison of MRI- and CT-based post-implant dosimetric analysis of transperineal interstitial permanent prostate brachytherapy. *Radiat Oncol Investig* 1998;6:90-96.
 265. Vaupel P, Kallinowski F, Okunieff P. Blood flow, oxygen and nutrient supply, and metabolic microenvironment of human tumors: a review. *Cancer Res* 1989;49:6449-6465.
 266. Brown JM, Giaccia AJ. The unique physiology of solid tumors: opportunities (and problems) for cancer therapy. *Cancer Res* 1998;58:1408-1416.
 267. Yao KS, Clayton M, O'Dwyer PJ. Apoptosis in human adenocarcinoma HT29 cells induced by exposure to hypoxia. *J Natl Cancer Inst* 1995;87:117-122.
 268. van den Berg AP, van Geel CA, van Hooije CM, *et al.* Tumor hypoxia--a confounding or exploitable factor in interstitial brachytherapy? Effects of tissue trauma in an experimental rat tumor model. *Int J Radiat Oncol Biol Phys* 2000;48:233-240.
 269. Badiozamani KR, Wallner K, Sutlief S, *et al.* Anticipating prostatic volume changes due to prostate brachytherapy. *Radiat Oncol Investig* 1999;7:360-364.
 270. Solhjem MC, Davis BJ, Pisansky TM, *et al.* Prostate volume measurement by transrectal ultrasound and computed tomography before and after permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2004;60:767-776.
 271. Waterman FM, Yue N, Reisinger S, *et al.* Effect of edema on the post-implant dosimetry of an I-125 prostate implant: a case study. *Int J Radiat Oncol Biol Phys* 1997;38:335-339.

272. Waterman FM, Yue N, Corn BW, *et al.* Edema associated with I-125 or Pd-103 prostate brachytherapy and its impact on post-implant dosimetry: an analysis based on serial CT acquisition. *Int J Radiat Oncol Biol Phys* 1998;41:1069-1077.
273. Prestidge BR, Bice WS, Kiefer EJ, *et al.* Timing of computed tomography-based postimplant assessment following permanent transperineal prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1998;40:1111-1115.
274. Willins J, Wallner K. Time-dependent changes in CT-based dosimetry of I-125 prostate brachytherapy. *Radiat Oncol Investig* 1998;6:157-160.
275. Merrick GS, Butler WM, Dorsey AT, *et al.* Influence of timing on the dosimetric analysis of transperineal ultrasound-guided, prostatic conformal brachytherapy. *Radiat Oncol Investig* 1998;6:182-190.
276. Dogan N, Mohideen N, Glasgow GP, *et al.* Effect of prostatic edema on CT-based postimplant dosimetry. *Int J Radiat Oncol Biol Phys* 2002;53:483-489.
277. Waterman FM, Dicker AP. Impact of postimplant edema on V(100) and D(90) in prostate brachytherapy: can implant quality be predicted on day 0? *Int J Radiat Oncol Biol Phys* 2002;53:610-621.
278. Taussky D, Austen L, Toi A, *et al.* Sequential evaluation of prostate edema after permanent seed prostate brachytherapy using CT-MRI fusion. *Int J Radiat Oncol Biol Phys* 2005;62:974-980.
279. Moerland MA. The effect of edema on postimplant dosimetry of permanent iodine-125 prostate implants: a simulation study. *Journal of Brachytherapy International* 1998;14:225-231.
280. Yue N, Dicker AP, Corn BW, *et al.* A dynamic model for the estimation of optimum timing of computed tomography scan for dose evaluation of 125I or 103Pd seed implant of prostate. *Int J Radiat Oncol Biol Phys* 1999;43:447-454.
281. Yue N, Chen Z, Peschel R, *et al.* Optimum timing for image-based dose evaluation of 125I and 103Pd prostate seed implants. *Int J Radiat Oncol Biol Phys* 1999;45:1063-1072.
282. Butler WM, Merrick GS, Dorsey AT, *et al.* Isotope choice and the effect of edema on prostate brachytherapy dosimetry. *Med Phys* 2000;27:1067-1075.
283. Chen Z, Yue N, Wang X, *et al.* Dosimetric effects of edema in permanent prostate seed implants: a rigorous solution. *Int J Radiat Oncol Biol Phys* 2000;47:1405-1419.
284. Fuks Z, Leibel SA, Wallner KE, *et al.* The effect of local control on metastatic dissemination in carcinoma of the prostate: long-term results in patients treated with 125I implantation. *Int J Radiat Oncol Biol Phys* 1991;21:537-547.
285. Yorke ED, Fuks Z, Norton L, *et al.* Modeling the development of metastases from primary and locally recurrent tumors: comparison with a clinical data base for prostatic cancer. *Cancer Res* 1993;53:2987-2993.
286. Stock RG, Stone NN, Tabert A, *et al.* A dose-response study for I-125 prostate implants. *Int J Radiat Oncol Biol Phys* 1998;41:101-108.
287. Potters L, Cao Y, Calugaru E, *et al.* A comprehensive review of CT-based dosimetry parameters and biochemical control in patients treated with permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2001;50:605-614.
288. Rivard MJ, Coursey BM, DeWerd LA, *et al.* Update of AAPM Task Group No. 43 Report: A revised AAPM protocol for brachytherapy dose calculations. *Med Phys* 2004;31:633-674.
289. Deasy JO, Blanco AI, Clark VH. CERR: a computational environment for radiotherapy research. *Med Phys* 2003;30:979-985.
290. El Naqa I, Suneja G, Lindsay PE, *et al.* Dose response explorer: an integrated open-source tool for exploring and modelling radiotherapy dose-volume outcome relationships. *Phys Med Biol* 2006;51:5719-5735.
291. El Naqa I, Bradley J, Blanco AI, *et al.* Multivariable modeling of radiotherapy outcomes, including dose-volume and clinical factors. *Int J Radiat Oncol Biol Phys* 2006;64:1275-1286.
292. Hope AJ, Lindsay PE, El Naqa I, *et al.* Modeling radiation pneumonitis risk with clinical, dosimetric, and spatial parameters. *Int J Radiat Oncol Biol Phys* 2006;65:112-124.

293. Breinman L, Friedman JH, Olshen R, *et al.* Classification and Regression Trees. Monterey, CA: Wadsworth; 1984.
294. Dunham M. Data mining introductory and advanced topics. New Jersey: Pearson Education Inc.; 2003.
295. Tan P, Steinbach M, Kumar V. Introduction to data mining. Boston: Pearson Education Inc.; 2006.
296. Gaspar L, Scott C, Rotman M, *et al.* Recursive partitioning analysis (RPA) of prognostic factors in three Radiation Therapy Oncology Group (RTOG) brain metastases trials. *Int J Radiat Oncol Biol Phys* 1997;37:745-751.
297. Gaspar LE, Scott C, Murray K, *et al.* Validation of the RTOG recursive partitioning analysis (RPA) classification for brain metastases. *Int J Radiat Oncol Biol Phys* 2000;47:1001-1006.
298. Curran WJ, Jr., Scott CB, Horton J, *et al.* Recursive partitioning analysis of prognostic factors in three Radiation Therapy Oncology Group malignant glioma trials. *J Natl Cancer Inst* 1993;85:704-710.
299. Scott CB, Scarantino C, Urtasun R, *et al.* Validation and predictive power of Radiation Therapy Oncology Group (RTOG) recursive partitioning analysis classes for malignant glioma patients: a report using RTOG 90-06. *Int J Radiat Oncol Biol Phys* 1998;40:51-55.
300. Cooper JS, Berkey B, Marcial V, *et al.* Validation of the RTOG recursive partitioning classification for head and neck tumors. *Head Neck* 2001;23:669-677.
301. Werner-Wasik M, Scott C, Cox JD, *et al.* Recursive partitioning analysis of 1999 Radiation Therapy Oncology Group (RTOG) patients with locally-advanced non-small-cell lung cancer (LA-NSCLC): identification of five groups with different survival. *Int J Radiat Oncol Biol Phys* 2000;48:1475-1482.
302. Komaki R, Scott CB, Byhardt R, *et al.* Failure patterns by prognostic group determined by recursive partitioning analysis (RPA) of 1547 patients on four radiation therapy oncology group (RTOG) studies in inoperable nonsmall-cell lung cancer (NSCLC). *Int J Radiat Oncol Biol Phys* 1998;42:263-267.
303. Hess KR, Abbruzzese MC, Lenzi R, *et al.* Classification and regression tree analysis of 1000 consecutive patients with unknown primary carcinoma. *Clin Cancer Res* 1999;5:3403-3410.
304. Thomas CR, Jr., Berkey BA, Minsky BD, *et al.* Recursive partitioning analysis of pretreatment variables of 416 patients with locoregional esophageal cancer treated with definitive concomitant chemoradiotherapy on Intergroup and Radiation Therapy Oncology Group trials. *Int J Radiat Oncol Biol Phys* 2004;58:1405-1410.
305. Katz A, Buchholz TA, Thames H, *et al.* Recursive partitioning analysis of locoregional recurrence patterns following mastectomy: implications for adjuvant irradiation. *Int J Radiat Oncol Biol Phys* 2001;50:397-403.
306. Freedman GM, Hanlon AL, Fowble BL, *et al.* Recursive partitioning identifies patients at high and low risk for ipsilateral tumor recurrence after breast-conserving surgery and radiation. *J Clin Oncol* 2002;20:4015-4021.
307. Zhang H, Yu CY, Singer B. Cell and tumor classification using gene expression data: construction of forests. *Proc Natl Acad Sci U S A* 2003;100:4168-4172.
308. Zhang H, Yu CY, Singer B, *et al.* Recursive partitioning for tumor classification with gene expression microarray data. *Proc Natl Acad Sci U S A* 2001;98:6730-6735.
309. Kawakami S, Hyochi N, Yonese J, *et al.* Three-dimensional combination of transrectal and transperineal biopsies for efficient detection of stage T1c prostate cancer. *Int J Clin Oncol* 2006;11:127-132.
310. Kawakami S, Okuno T, Yonese J, *et al.* Optimal Sampling Sites for Repeat Prostate Biopsy: A Recursive Partitioning Analysis of Three-Dimensional 26-Core Systematic Biopsy. *Eur Urol* 2006.
311. Cheung R, Tucker SL, Kuban DA. First-year PSA kinetics and minima after prostate cancer radiotherapy are predictive of overall survival. *Int J Radiat Oncol Biol Phys* 2006;66:20-24.
312. Cheung R, Tucker SL, Dong L, *et al.* Dose-response for biochemical control among

- high-risk prostate cancer patients after external beam radiotherapy. *Int J Radiat Oncol Biol Phys* 2003;56:1234-1240.
313. Thames HD, Kuban DA, DeSilvio ML, *et al.* Increasing external beam dose for T1-T2 prostate cancer: effect on risk groups. *Int J Radiat Oncol Biol Phys* 2006;65:975-981.
 314. Horwitz EM, Hanlon AL, Pinover WH, *et al.* Defining the optimal radiation dose with three-dimensional conformal radiation therapy for patients with nonmetastatic prostate carcinoma by using recursive partitioning techniques. *Cancer* 2001;92:1281-1287.
 315. Gretzer MB, Epstein JI, Pound CR, *et al.* Substratification of stage T1C prostate cancer based on the probability of biochemical recurrence. *Urology* 2002;60:1034-1039.
 316. Williams SG, Millar JL, Dally MJ, *et al.* What defines intermediate-risk prostate cancer? Variability in published prognostic models. *Int J Radiat Oncol Biol Phys* 2004;58:11-18.
 317. Banerjee M, Biswas D, Sakr W, *et al.* Recursive partitioning for prognostic grouping of patients with clinically localized prostate carcinoma. *Cancer* 2000;89:404-411.
 318. Williams SG, Duchesne GM, Gogna NK, *et al.* An international multicenter study evaluating the impact of an alternative biochemical failure definition on the judgment of prostate cancer risk. *Int J Radiat Oncol Biol Phys* 2006;65:351-357.
 319. Shulman MJ, Benaim EA. Prognostic model of event-free survival for patients with androgen-independent prostate carcinoma. *Cancer* 2005;103:2280-2286.
 320. Papik K, Molnar B, Schaefer R, *et al.* Application of neural networks in medicine - a review. *Medical Science Monitor* 1998;4:538-546.
 321. Reddick WE, Mulhern RK, Elkin TD, *et al.* A hybrid neural network analysis of subtle brain volume differences in children surviving brain tumors. *Magn Reson Imaging* 1998;16:413-421.
 322. Song JH, Venkatesh SS, Conant EA, *et al.* Comparative analysis of logistic regression and artificial neural network for computer-aided diagnosis of breast masses. *Acad Radiol* 2005;12:487-495.
 323. Prater JS, Richard WD. Segmenting ultrasound images of the prostate using neural networks. *Ultrason Imaging* 1992;14:159-185.
 324. Ravdin PM, Clark GM. A practical application of neural network analysis for predicting outcome of individual breast cancer patients. *Breast Cancer Res Treat* 1992;22:285-293.
 325. Floyd CE, Jr., Lo JY, Yun AJ, *et al.* Prediction of breast cancer malignancy using an artificial neural network. *Cancer* 1994;74:2944-2948.
 326. Jerez-Aragones JM, Gomez-Ruiz JA, Ramos-Jimenez G, *et al.* A combined neural network and decision trees model for prognosis of breast cancer relapse. *Artif Intell Med* 2003;27:45-63.
 327. Biganzoli E, Boracchi P, Coradini D, *et al.* Prognosis in node-negative primary breast cancer: a neural network analysis of risk profiles using routinely assessed factors. *Ann Oncol* 2003;14:1484-1493.
 328. Bryce TJ, Dewhurst MW, Floyd CE, Jr., *et al.* Artificial neural network model of survival in patients treated with irradiation with and without concurrent chemotherapy for advanced carcinoma of the head and neck. *Int J Radiat Oncol Biol Phys* 1998;41:339-345.
 329. Su M, Miften M, Whiddon C, *et al.* An artificial neural network for predicting the incidence of radiation pneumonitis. *Med Phys* 2005;32:318-325.
 330. Anagnostou T, Remzi M, Lykourinas M, *et al.* Artificial neural networks for decision-making in urologic oncology. *Eur Urol* 2003;43:596-603.
 331. Sargent DJ. Comparison of artificial neural networks with other statistical approaches: results from medical data sets. *Cancer* 2001;91:1636-1642.
 332. Finne P, Finne R, Auvinen A, *et al.* Predicting the outcome of prostate biopsy in screen-positive men by a multilayer perceptron network. *Urology* 2000;56:418-422.
 333. Kalra P, Togami J, Bansal BSG, *et al.* A neurocomputational model for prostate carcinoma detection. *Cancer* 2003;98:1849-1854.
 334. Han M, Snow PB, Brandt JM, *et al.* Evaluation of artificial neural networks for the prediction of pathologic stage in prostate carcinoma. *Cancer* 2001;91:1661-1666.
 335. Mattfeldt T, Kestler HA, Hautmann R, *et al.* Prediction of prostatic cancer progression

- after radical prostatectomy using artificial neural networks: a feasibility study. *BJU Int* 1999;84:316-323.
336. Potter SR, Miller MC, Mangold LA, *et al.* Genetically engineered neural networks for predicting prostate cancer progression after radical prostatectomy. *Urology* 1999;54:791-795.
337. Han M, Snow PB, Epstein JI, *et al.* A neural network predicts progression for men with gleason score 3+4 versus 4+3 tumors after radical prostatectomy. *Urology* 2000;56:994-999.
338. Gulliford SL, Webb S, Rowbottom CG, *et al.* Use of artificial neural networks to predict biological outcomes for patients receiving radical radiotherapy of the prostate. *Radiother Oncol* 2004;71:3-12.
339. Han M, Partin AW, Piantadosi S, *et al.* Era specific biochemical recurrence-free survival following radical prostatectomy for clinically localized prostate cancer. *J Urol* 2001;166:416-419.
340. Sengupta S, Slezak JM, Blute ML, *et al.* Trends in distribution and prognostic significance of Gleason grades on radical retropubic prostatectomy specimens between 1989 and 2001. *Cancer* 2006;106:2630-2635.
341. Zagars GK, Ayala AG, von Eschenbach AC, *et al.* The prognostic importance of Gleason grade in prostatic adenocarcinoma: a long-term follow-up study of 648 patients treated with radiation therapy. *Int J Radiat Oncol Biol Phys* 1995;31:237-245.
342. Wong WW, Schild SE, Vora SA, *et al.* Association of percent positive prostate biopsies and perineural invasion with biochemical outcome after external beam radiotherapy for localized prostate cancer. *Int J Radiat Oncol Biol Phys* 2004;60:24-29.
343. Vicini FA, Horwitz EM, Kini VR, *et al.* Radiotherapy options for localized prostate cancer based upon pretreatment serum prostate-specific antigen levels and biochemical control: a comprehensive review of the literature. *Int J Radiat Oncol Biol Phys* 1998;40:1101-1110.
344. Vicini FA, Kini VR, Edmundson G, *et al.* A comprehensive review of prostate cancer brachytherapy: defining an optimal technique. *Int J Radiat Oncol Biol Phys* 1999;44:483-491.
345. Jones TD, Koch MO, Bunde PJ, *et al.* Is prostate-specific antigen (PSA) density better than the preoperative PSA level in predicting early biochemical recurrence of prostate cancer after radical prostatectomy? *BJU Int* 2006;97:480-484.
346. Potters L, Cha C, Oshinsky G, *et al.* Risk profiles to predict PSA relapse-free survival for patients undergoing permanent prostate brachytherapy. *Cancer J Sci Am* 1999;5:301-306.
347. Potters L, Torre T, Ashley R, *et al.* Examining the role of neoadjuvant androgen deprivation in patients undergoing prostate brachytherapy. *J Clin Oncol* 2000;18:1187-1192.
348. Merrick GS, Butler WM, Galbreath RW, *et al.* Five-year biochemical outcome following permanent interstitial brachytherapy for clinical T1-T3 prostate cancer. *Int J Radiat Oncol Biol Phys* 2001;51:41-48.
349. Merrick GS, Butler WM, Galbreath RW, *et al.* Does hormonal manipulation in conjunction with permanent interstitial brachytherapy, with or without supplemental external beam irradiation, improve the biochemical outcome for men with intermediate or high-risk prostate cancer? *BJU Int* 2003;91:23-29.
350. Lee LN, Stock RG, Stone NN. Role of hormonal therapy in the management of intermediate- to high-risk prostate cancer treated with permanent radioactive seed implantation. *Int J Radiat Oncol Biol Phys* 2002;52:444-452.
351. Beyer DC, McKeough T, Thomas T. Impact of short course hormonal therapy on overall and cancer specific survival after permanent prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2005;61:1299-1305.
352. Ash D, Al-Qaisieh B, Bottomley D, *et al.* The impact of hormone therapy on post-implant dosimetry and outcome following Iodine-125 implant monotherapy for localised prostate cancer. *Radiother Oncol* 2005;75:303-306.
353. Crook J, McLean M, Yeung I, *et al.* MRI-CT fusion to assess postbrachytherapy prostate volume and the effects of prolonged edema on dosimetry following transperineal

- interstitial permanent prostate brachytherapy. *Brachytherapy* 2004;3:55-60.
354. McLaughlin PW, Narayana V, Kessler M, *et al.* The use of mutual information in registration of CT and MRI datasets post permanent implant. *Brachytherapy* 2004;3:61-70.
355. Reed DR, Wallner K, Ford E, *et al.* Effect of post-implant edema on prostate brachytherapy treatment margins. *Int J Radiat Oncol Biol Phys* 2005;63:1469-1473.
356. Merrick GS, Butler WM, Dorsey AT, *et al.* Potential role of various dosimetric quality indicators in prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 1999;44:717-724.
357. McLaughlin P, Narayana V, Pan C, *et al.* Comparison of day 0 and day 14 dosimetry for permanent prostate implants using stranded seeds. *Int J Radiat Oncol Biol Phys* 2006;64:144-150.
358. Stock RG, Stone NN, Lo YC, *et al.* Postimplant dosimetry for (125)I prostate implants: definitions and factors affecting outcome. *Int J Radiat Oncol Biol Phys* 2000;48:899-906.
359. Ash D, Al-Qaisieh B, Bottomley D, *et al.* The correlation between D90 and outcome for I-125 seed implant monotherapy for localised prostate cancer. *Radiother Oncol* 2006;79:185-189.
360. Robert Lee W, Deguzman AF, McMullen KP, *et al.* Dosimetry and cancer control after low-dose-rate prostate brachytherapy. *Int J Radiat Oncol Biol Phys* 2005;61:52-59.
361. Papagikos MA, Deguzman AF, Rossi PJ, *et al.* Dosimetric quantifiers for low-dose-rate prostate brachytherapy: is V(100) superior to D(90)? *Brachytherapy* 2005;4:252-258.
362. Cheung R, Tucker SL, Lee AK, *et al.* Dose-response characteristics of low- and intermediate-risk prostate cancer treated with external beam radiotherapy. *Int J Radiat Oncol Biol Phys* 2005;61:993-1002.
363. Levegrun S, Jackson A, Zelefsky MJ, *et al.* Fitting tumor control probability models to biopsy outcome after three-dimensional conformal radiation therapy of prostate cancer: pitfalls in deducing radiobiologic parameters for tumors from clinical data. *Int J Radiat Oncol Biol Phys* 2001;51:1064-1080.
364. King CR. LDR vs. HDR brachytherapy for localized prostate cancer: the view from radiobiological models. *Brachytherapy* 2002;1:219-226.
365. Moriguchi S, Hayashi Y, Nose Y, *et al.* A comparison of the logistic regression and the Cox proportional hazard models in retrospective studies on the prognosis of patients with gastric cancer. *J Surg Oncol* 1993;52:9-13.
366. Virtanen A, Gomari M, Kranse R, *et al.* Estimation of prostate cancer probability by logistic regression: free and total prostate-specific antigen, digital rectal examination, and heredity are significant variables. *Clin Chem* 1999;45:987-994.
367. Aslam N, Banerjee S, Carr JV, *et al.* Prospective evaluation of logistic regression models for the diagnosis of ovarian cancer. *Obstet Gynecol* 2000;96:75-80.
368. Lumachi F, Ermani M, Brandes AA, *et al.* Predictive value of different prognostic factors in breast cancer recurrences: multivariate analysis using a logistic regression model. *Anticancer Res* 2001;21:4105-4108.
369. Forman JD, Duclos M, Shamsa F, *et al.* Predicting the need for adjuvant systemic therapy in patients receiving postprostatectomy irradiation. *Urology* 1996;47:382-386.
370. Levegrun S, Jackson A, Zelefsky MJ, *et al.* Analysis of biopsy outcome after three-dimensional conformal radiation therapy of prostate cancer using dose-distribution variables and tumor control probability models. *Int J Radiat Oncol Biol Phys* 2000;47:1245-1260.
371. Zapatero A, Garcia-Vicente F, Modolell I, *et al.* Impact of mean rectal dose on late rectal bleeding after conformal radiotherapy for prostate cancer: dose-volume effect. *Int J Radiat Oncol Biol Phys* 2004;59:1343-1351.
372. Pisansky TM, Blute ML, Hillman DW, *et al.* The relevance of prostatectomy findings for brachytherapy selection in patients with localized prostate carcinoma. *Cancer* 2002;95:513-519.
373. Shipley WU, Thames HD, Sandler HM, *et al.* Radiation therapy for clinically localized prostate cancer: a multi-institutional pooled analysis. *Jama* 1999;281:1598-1604.
374. Tsien CL, Fraser HS, Long WJ, *et al.* Using classification tree and logistic regression methods to diagnose myocardial infarction. *Medinfo* 1998;9 Pt 1:493-497.

375. Montie JE, Wei JT. Artificial neural networks for prostate carcinoma risk assessment. An overview. *Cancer* 2001;91:1647-1652.
376. Veltri RW, Chaudhari M, Miller MC, *et al.* Comparison of logistic regression and neural net modeling for prediction of prostate cancer pathologic stage. *Clin Chem* 2002;48:1828-1834.
377. Porter C, O'Donnell C, Crawford ED, *et al.* Artificial neural network model to predict biochemical failure after radical prostatectomy. *Mol Urol* 2001;5:159-162.