

# **Intensity Modulated Radiation Therapy**

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## **Final Evidence Report**

### **Appendix B: Excluded References**

August 17, 2012

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## ***Intensity Modulated Radiation Therapy***

### **Appendix B. Excluded Studies**

**August 2012**

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## Appendix B. Excluded Studies

### Cochrane

- Ali, S., & Habib, I. (2011). Pharmacological interventions for the prevention and treatment of radiation colitis, enteritis and proctitis. *Cochrane Database of Systematic Reviews*, 2 *Exclude: Study design (study protocol)*
- AlMamgani, A., Heemsbergen, W. D., Peeters, S. T., & Lebesque, J. V. (2009). Role of intensity-modulated radiotherapy in reducing toxicity in dose escalation for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 73(3), 685-691. *Included from Medline® results*
- Askoxylakis, V., Jensen, A. D., Hafner, M. F., Fetzner, L., Sterzing, F., Heil, J., Sohn, C., Husing, J., Tiefenbacher, U., Wenz, F., Debus, J., & Hof, H. (2011). Simultaneous integrated boost for adjuvant treatment of breast cancer-intensity modulated vs. conventional radiotherapy: The IMRT-MC2 trial. *BMC Cancer*, 11, 249. *Exclude: Study design (description of an upcoming clinical trial)*
- Ayyangar, K. M., Fung, A. Y., Li, S., Pillai, S., YoeSein, M. M., Zhen, W., & Enke, C. A. (2005). Dose volume histogram comparison between ADAC pinnacle and nomos corvus systems for IMRT. *Australasian Physical & Engineering Sciences in Medicine / Supported by the Australasian College of Physical Scientists in Medicine and the Australasian Association of Physical Sciences in Medicine*, 28(1), 1-7. *Exclude: Study size*
- Baalbergen, A., Veenstra, Y., Stalpers, L. L., & Ansink, A. C. (2010). Primary surgery versus primary radiation therapy with or without chemotherapy for early adenocarcinoma of the uterine cervix. *Cochrane Database of Systematic Reviews*, 5 *Exclude: Intervention does not include IMRT*
- Barnett, G. C., Wilkinson, J., Moody, A. M., Wilson, C. B., Sharma, R., Klager, S., Hoole, A. C., Twyman, N., Burnet, N. G., & Coles, C. E. (2009). A randomised controlled trial of forward-planned radiotherapy (IMRT) for early breast cancer: Baseline characteristics and dosimetry results. *Radiotherapy and Oncology: Journal of the European Society for Therapeutic Radiology and Oncology*, 92(1), 34-41. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Baujat, B., Bourhis, J., Blanchard, P., Overgaard, J., Ang, K. K., Saunders, M., Le Maitre, A., Bernier, J., Horiot, C. J., Maillard, E., Pajak, T. F., Poulsen, M. G., Bourredjem, A., O'Sullivan, B., Dobrowsky, W., Andrzej, H., Skladowski, K., Hay, J. H., Pinto, H. J. L., Fu, K. K., Fallai, C., Sylvester, R., & Pignon, P. J. (2009). Hyperfractionated or accelerated radiotherapy for head and neck cancer. *Cochrane Database of Systematic Reviews*, 1. *Exclude: Intervention does not include IMRT*
- Bednarz, G., Michalski, D., Anne, P. R., & Valicenti, R. K. (2004). Inverse treatment planning using volume-based objective functions. *Physics in Medicine and Biology*, 49(12), 2503-2514. *Exclude: Treatment planning*
- Birnbaum, A., Dipetrillo, T., Rathore, R., Anderson, E., Wanebo, H., Puthwala, Y., Joyce, D., Safran, H., Henderson, D., Kennedy, T., Ready, N., & Sio, T. T. (2010). Cetuximab, paclitaxel, carboplatin, and radiation for head and neck cancer: A toxicity analysis. *American Journal of Clinical Oncology*, 33(2). *Included from Medline® results*
- Bonetta, A., Derelli, R., & Di Pierro, F. (2011). Cranberry extracts reduce urinary tract infections during radiotherapy for prostate adenocarcinoma [abstract]. *Anticancer Research*, 31(5), 1849-1850. *Exclude: Intervention not of interest (cranberry extract)*
- Bos, L. J., Damen, E. M., de Boer, R. W., Mijnheer, B. J., McShan, D. L., Fraass Kessler, M. L., & Lebesque, J. V. (2002). Reduction of rectal dose by integration of the boost in the large-field treatment plan for prostate irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 52(1), 254-265. *Exclude: Study size*
- Braaksma, M., & Levendag, P. (2002). Tools for optimal tissue sparing in concomitant chemoradiation of advanced head and neck cancer: Subcutaneous amifostine and computed tomography-based target delineation. *Seminars in Oncology*, 29(6 Suppl 19), 63-70. *Exclude: Date*
- Braam, P. M., Terhaard, C. H., Roesink, J. M., & Raaijmakers, C. P. (2006). Intensity-modulated radiotherapy significantly reduces xerostomia compared with conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 975-980. *Exclude: Date*

- Brixey, C., Roeske, J., Rotmensch, J., Waggoner, S., Yamada, D., & Mundt, A. J. (2002). Hematologic toxicity in gynecologic malignancies. patients treated with intensity-modulated pelvic radiation therapy [abstract]. *Gynecologic Oncology*, 84(3), 516-517. *Exclude: Study design (conference abstract)*
- Buettner, F., Gulliford, S. L., Webb, S., & Partridge, M. (2010). Using bayesian logistic regression to evaluate a new type of dosimetric constraint for prostate radiotherapy treatment planning. *Medical Physics*, 37(4), 1768-1777. *Exclude: Treatment planning*
- Chan, R., Webster, J., Battistutta, D., Chung, B., & Brooks, L. (2010). Interventions for preventing and managing radiation-induced skin reactions in cancer patients. *Cochrane Database of Systematic Reviews*, 5 *Exclude: Study design (study protocol)*
- Chao, K. S. C., Ozyigit, G., & and Thorsdad, W. L. (2003). Toxicity profile of intensity-modulated radiation therapy for head and neck carcinoma and potential role of amifostine. *Semin Oncol*, 30(6 (Suppl 18)), 101-108. *Exclude: Date*
- Chapman, E., & Garcia Dieguez, M. (2010). Radiotherapy for malignant pleural mesothelioma. *Cochrane Database of Systematic Reviews*, 4 *Exclude: Outcomes not specific to IMRT*
- Chen, W. C., Hwang, T. Z., Wang, W. H., Lu, C. H., Chen, C. C., Chen, C. M., Weng, H. H., Lai, C. H., & Chen, M. F. (2009). Comparison between conventional and intensity-modulated post-operative radiotherapy for stage III and IV oral cavity cancer in terms of treatment results and toxicity. *Oral Oncology*, 45(6), 505-510. *Exclude: Date*
- Chung, H. T., Xia, P., Chan, L. W., ParkSomers, E., & Roach, M. (2009). Does image-guided radiotherapy improve toxicity profile in whole pelvic-treated high-risk prostate cancer? comparison between IG-IMRT and IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 73(1), 53-60. *Exclude: Date*
- Clark, C. H., Hansen, V. N., Chantler, H., Edwards, C., James, H. V., Webster, G., Miles, E. A., Guerrero Urbano, M. T., Bhide, S. A., Bidmead, A. M., Nutting, C. M., & PARSPORT Trial Management, G. (2009). Dosimetry audit for a multi-centre IMRT head and neck trial. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 93(1), 102-108. *Exclude: Treatment planning*
- Clark, C. H., Miles, E. A., Urbano, M. T., Bhide, S. A., Bidmead, A. M., Harrington, K. J., Nutting, C. M., & UK PARSPORT Trial Management, G. (2009). Pre-trial quality assurance processes for an intensity-modulated radiation therapy (IMRT) trial: PARSPORT, a UK multicentre phase III trial comparing conventional radiotherapy and parotid-sparing IMRT for locally advanced head and neck cancer. *The British Journal of Radiology*, 82(979), 585-594. *Exclude: Treatment planning*
- Coles, C., Donovan, E., Venables, K., Rowlings, C., Maylex, H., Bentzen, S., Sydenham, M., Bliss, J., & Yarnold, J. (2004). Randomised trial testing intensity modulated radiotherapy and partial organ radiotherapy in early breast cancer (import trial). *British Journal of Cancer*, 91(Suppl 1), S80. *Exclude: Study design (poster)*
- Daly, T., Hickey, B. E., Lehman, M., Francis, D. P., & See, A. M. (2011). Adjuvant radiotherapy following radical prostatectomy for prostate cancer. *Cochrane Database of Systematic Reviews*, 12 *Exclude: Outcomes not specific to IMRT*
- De HaasKock, D. F. M., Buijsen, J., PijlsJohannesma, M., Lutgens, L., Lammering, G., van Mastrigt, G. A., Ruyscher, D. K. M., Lambin, P., & van der Zee, J. (2009). Concomitant hyperthermia and radiation therapy for treating locally advanced rectal cancer. *Cochrane Database of Systematic Reviews*, 1 *Exclude: Intervention does not include IMRT*
- Dhabaan, A., Elder, E., Schreibmann, E., Crocker, I., Curran, W. J., Oyesiku, N. M., Shu, H. K., & Fox, T. (2010). Dosimetric performance of the new high-definition multileaf collimator for intracranial stereotactic radiosurgery. *Journal of Applied Clinical Medical Physics / American College of Medical Physics*, 11(3), 3040. *Exclude: Intervention not of interest (stereotactic radiosurgery)*

- Dijkema, T., Terhaard, C. H., Roesink, J. M., Braam, P. M., van Gils, C. H., & Moerland Raaijmakers, C. P. (2008). Large cohort dose-volume response analysis of parotid gland function after radiotherapy: Intensity-modulated versus conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1101-1109. *Exclude: Date*
- Donovan, E., Bleakley, N., Denholm, E., Evans, P., Gothard, L., Hanson, J., Peckitt, C., Reise, S., Ross, G., Sharp, G., SymondsTayler, R., Tait, D., Yarnold, J., & Breast Technology, G. (2007). Randomised trial of standard 2D radiotherapy (RT) versus intensity modulated radiotherapy (IMRT) in patients prescribed breast radiotherapy. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 82(3), 254-264. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Donovan, E. M., Bleackley, N. J., Evans, P. M., Reise, S. F., & Yarnold, J. R. (2002). Dose-position and dose-volume histogram analysis of standard wedged and intensity modulated treatments in breast radiotherapy. *The British Journal of Radiology*, 75(900), 967-973. *Exclude: Treatment planning*
- Eliyas, S., Porter, W. J. R., Briggs, P., & AlKhayatt, A. (2010). Dental extractions prior to radiotherapy to the jaws for reducing post-radiotherapy dental complications. *Cochrane Database of Systematic Reviews*, 8 *Exclude: Study design (study protocol)*
- Fang, F. M., Chien, C. Y., Tsai, W. L., Chen, H. C., Hsu, H. C., Lui, C. C., . . . Huang, H. Y. (2008). Quality of life and survival outcome for patients with nasopharyngeal carcinoma receiving three-dimensional conformal radiotherapy vs. intensity-modulated radiotherapy-a longitudinal study. *International Journal of Radiation Oncology, Biology, Physics*, 72(2), 356-364. *Exclude: Date*
- Feigenberg, S. J., Paskalev, K., McNeeley, S., Horwitz, E. M., Konski, A., Wang, L., Ma, C., & Pollack, A. (2007). Comparing computed tomography localization with daily ultrasound during image-guided radiation therapy for the treatment of prostate cancer: A prospective evaluation. *Journal of Applied Clinical Medical Physics / American College of Medical Physics*, 8(3), 2268. *Exclude: Study size*
- Fiorino, C., Dell'Oca, I., Pierelli, A., Broggi, S., De Martin, E., Di Muzio, N., Longobardi, B., Fazio, F., & Calandrino, R. (2006). Significant improvement in normal tissue sparing and target coverage for head and neck cancer by means of helical tomotherapy. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 78(3), 276-282. *Exclude: Study size*
- Fong, A., Bromley, R., Beat, M., Vien, D., Dineley, J., & Morgan, G. (2009). Dosimetric comparison of intensity modulated radiotherapy techniques and standard wedged tangents for whole breast radiotherapy. *Journal of Medical Imaging and Radiation Oncology*, 53(1), 92-99. *Exclude: Treatment planning*
- Galper, S. L., Deshpande, H., Rose, M. G., & Decker, R. H. (2009) Cetuximab versus cisplatin concurrent with IMRT in locally advanced head and neck cancer (LAHNC). *Exclude: Intervention not of interest (chemotherapy)*
- Gao, W., Thawani, N., Mutyala, S., Phaeton, R., Yaparpalvi, R., Vainshtein, J., Mehta, K., & Hannan, R. (2009). Comparison of early outcomes of concomitant chemoradiotherapy using intensity-modulated radiation therapy versus conventional radiotherapy for treatment of locally advanced cervical cancer [abstract]. *Gynecologic Oncology*, 112(2 Suppl 1), S42. *Exclude: Study design (abstract)*
- Georg, D., Kirisits, C., Hillbrand, M., Dimopoulos, J., & Potter, R. (2008). Image-guided radiotherapy for cervix cancer: High-tech external beam therapy versus high-tech brachytherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1272-1278. *Exclude: Study size*
- Givens, D. J., Karnell, L. H., Gupta, A. K., Clamon, G. H., Pagedar, N. A., Chang, K. E., Van Daele, D. J., & Funk, G. F. (2009). Adverse events associated with concurrent chemoradiation therapy in patients with head and neck cancer. *Archives of Otolaryngology--Head & Neck Surgery*, 135(12), 1209-1217. *Included from Medline® results*
- Glenny, A., Furness, S., Worthington, H. V., Conway, D. I., Oliver, R., Clarkson, J. E., Macluskey, M., Pavitt, S., Chan, K. W. K., Brocklehurst, P., & The CSROC Expert Panel. (2009). Interventions for the treatment of oral cavity

- and oropharyngeal cancer: Radiotherapy. *Cochrane Database of Systematic Reviews*, 1 Exclude: Intervention does not include IMRT
- Guerrero Urbano, M. T., Clark, C. H., Kong, C., Miles, E., Dearnaley, D. P., Harrington, K. J., Nutting, C. M., & PARSPORT Trial Management, G. (2007). Target volume definition for head and neck intensity modulated radiotherapy: Pre-clinical evaluation of PARSPORT trial guidelines. *Clinical Oncology (Royal College of Radiologists (Great Britain))*, 19(8), 604-613. Exclude: Study size
- Guo, J., Cai, J., & Cao, F. (2009). [Application of mask fixation method and integrated block in radiotherapy for nasopharyngeal carcinoma]. *Chinese Journal of Clinical Oncology*, 36(18), 1024-1026. Exclude: Treatment planning
- Gupta, T., Jain, S., Agarwal, J. P., GhoshLaskar, S., Phurailatpam, R., PaiShetty, R., & Dinshaw, K. A. (2011). Prospective assessment of patterns of failure after high-precision definitive (chemo)radiation in head-and-neck squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 80(2), 522-531. Included from Medline® results
- Hasegawa, Y., Iuchi, T., Osato, K., Kodama, T., Toyama, N., & Hatano, K. (2011). Comparison of intensity modulated radiotherapy and dynamic three-dimensional conformal radiotherapy with regard to dose distribution and sparing of organs at risk. *Neurologia Medico-Chirurgica*, 51(5), 349-355. Exclude: Study size
- Herrick, J. S., Neill, C. J., & Rosser, P. F. (2008). A comprehensive clinical 3-dimensional dosimetric analysis of forward planned IMRT and conventional wedge planned techniques for intact breast radiotherapy. *Medical Dosimetry : Official Journal of the American Association of Medical Dosimetrists*, 33(1), 62-70. Exclude: Treatment planning
- Huang, S. H., Catton, C., Jezioranski, J., Bayley, A., Rose, S., & Rosewall, T. (2008). The effect of changing technique, dose, and PTV margin on therapeutic ratio during prostate radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1057-1064. Exclude: Treatment planning
- Huang, W. Y., Jen, Y. M., Chen, C. M., Su, Y. F., Lin, C. S., Lin, Y. S., . . . Chang, L. P. (2010). Intensity modulated radiotherapy with concurrent chemotherapy for larynx preservation of advanced resectable hypopharyngeal cancer. *Radiation Oncology*, 5, 37. Included from Medline® results
- Hurkmans, C. W., Meijer, G. J., van VlietVroegindewei, C., van der Sangen, M. J., & Cassee, J. (2006). High-dose simultaneously integrated breast boost using intensity-modulated radiotherapy and inverse optimization. *International Journal of Radiation Oncology Biology Physics*, 66(3), 923-930. Exclude: Study size
- Institute of Cancer, R.COSTAR - A multicentre randomised study of cochlear sparing intensity modulated radiotherapy versus conventional radiotherapy in patients with parotid tumours. *ICTRP [Accessed 14 Oct.2010] ID: ISRCTN81772291p.2010*, Exclude: Study design (description of clinical trial)
- Jalali, R., Malde, R., Bhutani, R., Budrukkar, A., Badwe, R., & Sarin, R. (2008). Prospective evaluation of concomitant tumour bed boost with whole breast irradiation in patients with locally advanced breast cancer undergoing breast-conserving therapy. *Breast (Edinburgh, Scotland)*, 17(1), 64-70.Exclude: Treatment planning
- James, M. L., Lehman, M., Hider, P. N., Jeffery, M., Hickey, B. E., & Francis, D. P. (2010). Fraction size in radiation treatment for breast conservation in early breast cancer. *Cochrane Database of Systematic Reviews*, 11 Exclude: Intervention does not include IMRT
- Johansson, K. A., Nilsson, P., Zackrisson, B., Ohlson, B., Kjellen, E., Mercke, C., AlvarezFonseca, M., Billstrom, A., BjorkEriksson, T., Bjor, O., Ekberg, L., Friesland, S., Karlsson, M., Lagerlund, M., Lundkvist, L., Lofroth, P. O., LofvanderThapper, K., Nilsson, A., Nyman, J., Persson, E., Reizenstein, J., Rosenbrand, H. O., Wiklund, F., & Wittgren, L. (2008). The quality assurance process for the ARTSCAN head and neck study - a practical interactive approach for QA in 3DCRT and IMRT. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 87(2), 290-299. Exclude: Date



- Kam, M. K., Leung, S. F., Zee, B., Chau, R. M., Suen, J. J., Mo, F., Lai, M., Ho, R., Cheung, K. Y., Yu, B. K., Chiu, S. K., Choi, P. H., Teo, P. M., Kwan, W. H., & Chan, A. T. (2007). Prospective randomized study of intensity-modulated radiotherapy on salivary gland function in early-stage nasopharyngeal carcinoma patients. *Journal of Clinical Oncology : Official Journal of the American Society of Clinical Oncology*, 25(31), 4873-4879. *Exclude: Date*
- Kam, M. K., Leung, S. F., Zee, B., Choi, P. H., Chau, R. M., Cheung, K. Y., Suen, J. J., Teo, P. M., Kwan, W. H., & Chan, A. T. Impact of intensity-modulated radiotherapy (IMRT) on salivary gland function in early-stage nasopharyngeal carcinoma (NPC) patients: A prospective randomized study. *Exclude: Study design (meeting abstract)*
- Khuntia, D., Harris, J., Bentzen, S. M., Kies Meyers, J. N., Foote, R. L., & Machtay, M. Increased oral mucositis after IMRT versus non-IMRT when combined with cetuximab and cisplatin or docetaxel for head and neck cancer: Preliminary results of RTOG 0234. *Exclude: Study design (abstract)*
- Kim, J. Y., Kim, D. Y., Kim, T. H., Park, S. Y., Lee, S. B., Shin, K. H., Pyo, H., Kim, J. Y., & Cho, K. H. (2007). Intensity-modulated radiotherapy with a belly board for rectal cancer. *International Journal of Colorectal Disease*, 22(4), 373-379. *Exclude: Treatment planning*
- Kim, Y., Verhey, L. J., & Xia, P. (2007). A feasibility study of using conventional jaws to deliver IMRT plans in the treatment of prostate cancer. *Physics in Medicine and Biology*, 52(8), 2147-2156. *Exclude: Study size*
- Kinhikar, R. A., Deshpande, S. S., Mahantshetty, U., Sarin, R., Shrivastava, S. K., & Deshpande, D. D. (2005). HDR brachytherapy combined with 3-D conformal vs. IMRT in left-sided breast cancer patients including internal mammary chain: Comparative analysis of dosimetric and technical parameters. *Journal of Applied Clinical Medical Physics / American College of Medical Physics*, 6(3), 1-12. *Exclude: Treatment planning*
- Krempien, R., Muentner, M. W., Huber, P. E., Nill, S., Friess, H., Timke, C., Diding, B., Buechler, P., Heeger, S., Herfarth, K. K., Abdollahi, A., Buchler, M. W., & Debus, J. (2005). Randomized phase II--study evaluating EGFR targeting therapy with cetuximab in combination with radiotherapy and chemotherapy for patients with locally advanced pancreatic cancer--PARC: Study protocol [ISRCTN56652283]. *BMC Cancer*, 5, 131. *Exclude: Study design (narrative of clinical trial)*
- Kumar, S., Shelley, M., Harrison, C., Coles, B., Wilt, T. J., & Mason, M. (2009). Neo-adjuvant and adjuvant hormone therapy for localised and locally advanced prostate cancer. *Cochrane Database of Systematic Reviews*, 1 *Exclude: Intervention not of interest (hormone therapy)*
- Kwong, D., McMillan, A., Pow, E., & Sham, J. A randomized trial comparing intensity modulated radiotherapy versus 2-dimensional radiotherapy for stage II nasopharyngeal carcinoma. *Exclude: Study design (abstract)*
- Kwong, D. I., Pow, E., McMillan, A., Sham, J., & Au, G. (2003). Intensity-modulated radiotherapy for early stage nasopharyngeal carcinoma: Preliminary results on parotid sparing [abstract]. *International Journal of Radiation Oncology Biology Physics*, 57(2 Suppl), S303. *Exclude: Study design (abstract)*
- Kwong, D. L., McMillan, A., Pow, E., & Sham, J. Value of intensity modulated radiotherapy for local control and salivary flow compared with conventional radiotherapy for stage II nasopharyngeal carcinoma. *Exclude: Study design (conference poster)*
- Lapeyre, M., Marchesi, V., Mege, A., Aletti, P., Graff, P., Racadot, S., Noel, A., & Marchal, C. (2004). [Intensity-modulated radiation therapy for head and neck cancers with bilateral irradiation of the neck : Preliminary results]. [Radiotherapie conformationnelle avec modulation d'intensite des cancers des voies aerodigestives superieures avec irradiation bilaterale du cou: resultats preliminaires.] *Cancer Radiotherapie : Journal De La Societe Francaise De Radiotherapie Oncologique*, 8(3), 134-147. *Exclude: Language (French)*
- Lee, C. T., Dong, L., Ahamad, A. W., Choi, H., Cheung, R., Lee, A. K., Horne, D. F., Breaux, A. J., & Kuban, D. A. (2005). Comparison of treatment volumes and techniques in prostate cancer radiation therapy. *American Journal of Clinical Oncology*, 28(6), 618-625. *Exclude: Study size*

- Lee, N. Y., de Arruda, F. F., Puri, D. R., Wolden, S. L., Narayana, A., Mechalakos, J., Venkatraman, E. S., Kraus, D., Shaha, A., Shah, J. P., Pfister, D. G., & Zelefsky, M. J. (2006). A comparison of intensity-modulated radiation therapy and concomitant boost radiotherapy in the setting of concurrent chemotherapy for locally advanced oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 966-974. Exclude: Date
- Li, G., S, Chen, S., J, Huang, H., X, Ning, S., & andH. (2011). A randomized clinical study of intensity-modulated radiotherapy vs conventional radiotherapy combined with chemotherapy in treating local/regional advanced nasopharyngeal carcinoma. *Tumor*, 31(4), 343-347. Exclude: Language (Chinese)
- Liang, K. L., Kao, T. C., Lin, J. C., Tseng, H. C., Su, M. C., Hsin, C. H., Shiao, J. Y., & Jiang, R. S. (2008). Nasal irrigation reduces postirradiation rhinosinusitis in patients with nasopharyngeal carcinoma. *American Journal of Rhinology*, 22(3), 258-262. Exclude: Date
- Liu, B., Lerma, F. A., Patel, S., Amin, P., Feng, Y., Yi, B. Y., & Yu, C. (2008). Dosimetric effects of the prone and supine positions on image guided localized prostate cancer radiotherapy. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 88(1), 67-76. Exclude: Treatment planning
- Livi, L., Buonamici, F. B., Simontacchi, G., Scotti, V., Fambrini, M., Compagnucci, A., Paiar, F., Scoccianti, S., Pallotta, S., Detti, B., Agresti, B., Talamonti, C., Mangoni, M., Bianchi, S., Cataliotti, L., Marrazzo, L., Bucciolini, M., & Biti, G. (2010). Accelerated partial breast irradiation with IMRT: New technical approach and interim analysis of acute toxicity in a phase III randomized clinical trial. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 509-515. Exclude: Included in systematic review (Hayes 2012 [partial breast])
- Lu, M., Freytag, S. O., Stricker, H., Kim, J. H., Barton, K., & Movsas, B. (2011). Adaptive seamless design for an efficacy trial of replication-competent adenovirus-mediated suicide gene therapy and radiation in newly-diagnosed prostate cancer (ReCAP trial). *Contemporary Clinical Trials*, 32(3), 453-460. Exclude: Study design (description of clinical trial)
- Luo, C., Yang, C. C., Narayan, S., Stern, R. L., Perks, J., Goldberg, Z., Ryu, J., Purdy, J. A., & Vijayakumar, S. (2006). Use of benchmark dose-volume histograms for selection of the optimal technique between three-dimensional conformal radiation therapy and intensity-modulated radiation therapy in prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 1253-1262. Exclude: Treatment planning
- Madani, I., Vakaet, L., Bonte, K., Boterberg, T., & De Neve, W. (2008). Intensity-modulated radiotherapy for cervical lymph node metastases from unknown primary cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1158-1166. Included from Medline® results
- Marten, A., Schmidt, J., Ose, J., Harig, S., Abel, U., Munter, M. W., Jager, D., Friess, H., Mayerle, J., Adler, G., Seufferlein, T., Gress, T., Schmid, R., & Buchler, M. W. (2009). A randomized multicentre phase II trial comparing adjuvant therapy in patients with interferon alpha-2b and 5-FU alone or in combination with either external radiation treatment and cisplatin (CapRI) or radiation alone regarding event-free survival - CapRI-2. *BMC Cancer*, 9, 160TN: SRTN79802092/SRTN. Exclude: Study design (description of clinical trial)
- Matzinger, O., Duclos, F., van den Bergh, A., Carrie, C., Villa, S., Kitsios, P., Poortmans, P., Sundar, S., van der SteenBanasik, E. M., Gulyban, A., Collette, L., Bolla, M., & EORTC Radiation Oncology, G. (1990). Acute toxicity of curative radiotherapy for intermediate- and high-risk localised prostate cancer in the EORTC trial 22991. *European Journal of Cancer (Oxford, England)* Included from Medline® results
- Matzinger, O., Poortmans, P., Giraud, J. Y., Maingon, P., Budiharto, T., van den Bergh, A. C., Davis, J. B., Musat, E., Ataman, F., Huyskens, D. P., Gulyban, A., Bolla, M., & EORTC Radiation Oncology, G. (2009). Quality assurance in the 22991 EORTC ROG trial in localized prostate cancer: Dummy run and individual case review. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 90(3), 285-290. Exclude: Treatment planning

- McDonald, M. W., Godette, K. D., Butker, E. K., Davis, L. W., & Johnstone, P. A. (2008). Long-term outcomes of IMRT for breast cancer: A single-institution cohort analysis. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1031-1040. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Moller, D. S., Khalil, A. A., Knap, M. M., Muren, L. P., & Hoffmann, L. (2011). A planning study of radiotherapy dose escalation of PET-active tumour volumes in non-small cell lung cancer patients. *Acta Oncologica (Stockholm, Sweden)*, 50(6), 883-888. *Exclude: Study size*
- Munshi, A., Pai, R. H., Phurailatpam, R., Budrukhar, A., Jalali, R., Sarin, R., Deshpande, D. D., Shrivastava, S. K., & Dinshaw, K. A. (2009). Do all patients of breast carcinoma need 3-dimensional CT-based planning? A dosimetric study comparing different breast sizes. *Medical Dosimetry : Official Journal of the American Association of Medical Dosimetrists*, 34(2), 140-144. *Exclude: Treatment planning*
- Munter, M., Timke, C., Abdollahi, A., Friess, H., Jaeger, D., Heeger, S., Buchler, M., Debus, J., Huber, P., & Krempien, R. (2008). Final results of a phase II trial [PARC-study ISRCTN56652283] for patients with primary inoperable locally advanced pancreatic cancer combining intensity modulated radiotherapy (IMRT) with cetuximab and gemcitabine [abstract no. 4613]. *Journal of Clinical Oncology: ASCO Annual Meeting Proceedings*, 26(15S part I), 241. *Exclude: Study design (conference abstract)*
- Murthy, V., Gupta, T., Kadam, A., GhoshLaskar, S., Budrukhar, A., Phurailatpam, R., Pai, R., & Agarwal, J. (2009). Time trial: A prospective comparative study of the time-resource burden for three-dimensional conformal radiotherapy and intensity-modulated radiotherapy in head and neck cancers. *Journal of Cancer Research and Therapeutics*, 5(2), 107-112. *Exclude: Treatment planning*
- Natia Esiashvili, Mariam Philip, Claire Mazewski, Anna Janss, Mourad Tighiouart, Roger J., Hudgins, Ian Crocker, Frederick Schwaibold, Robert B., & Marcus Jr. (2008). COMPARISON OF PATTERNS OF FAILURE AFTER VARIOUS RADIOTHERAPY POSTERIOIR FOSSA BOOST TECHNIQUES FOR AVERAGE-RISK MEDULLOBLASTOMA. [40th Annual Conference of the International Society of Paediatric Oncology, SIOP 2008, Berlin, Germany, Abstract M002] *Pediatr Blood Cancer*, 50(5(supplement)), 211. *Exclude: Study design (abstract)*
- Nijkamp, J., Kusters, M., BeetsTan, R. G., Martijn, H., Beets, G. L., van de Velde, C. J., & Marijnen, C. A. (2011). Three-dimensional analysis of recurrence patterns in rectal cancer: The cranial border in hypofractionated preoperative radiotherapy can be lowered. *International Journal of Radiation Oncology, Biology, Physics*, 80(1), 103-110. *Exclude: Study size*
- Nutting, C., A'Hern, R., Rogers Sydenham Adab, F., Harrington, K., & and Jefferies, S. First results of a phase III multicenter randomized controlled trial of intensity modulated (IMRT) versus conventional radiotherapy (RT) in head and neck cancer (PARSPORT: ISRCTN48243537; CRUK/03/005). *Exclude: Study design (conference abstract)*
- Nutting, C., Harrington, K., Rogers, S., Sydenham, M., Hern, R., & and Hall, E. (2010). Results of a phase III multi-centre randomised controlled trial of intensity modulated (IMRT) vs conventional radiotherapy (RT) in head and neck cancer (PARSPORT ISRCTN 48243537, Cruk/03/005). *Clin Oncol*, 22(10), 899. *Exclude: Study design (conference abstract)*
- Nutting, C. M., Morden, J. P., Harrington, K. J., Urbano, T. G., Bhide, S. A., Clark, C., Miles, E. A., Miah, A. B., Newbold, K., Tanay, M., Adab, F., Jefferies, S. J., Scrase, C., Yap, B. K., A'Hern, R. P., Sydenham Emson, M., Hall, E., & Parsport. (2011). Parotid-sparing intensity modulated versus conventional radiotherapy in head and neck cancer (PARSPORT): A phase 3 multicentre randomised controlled trial. *The Lancet Oncology*, 12(2), 127-136. *Included from Medline® results*
- O'Rourke, N., Roque i Figuls, M., Farre Bernado, N., & Macbeth, F. (2010). Concurrent chemoradiotherapy in non-small cell lung cancer. *Cochrane Database of Systematic Reviews*, 6 *Exclude: Comparator not of interest (radiotherapy vs chemoradiotherapy)*
- Paelinck, L., Smedt, B. D., Reynaert, N., Coghe, M., Gersem, W. D., Wagter, C. D., Vanderstraeten, B., Thierens, H., & Neve, W. D. (2006). Comparison of dose-volume histograms of IMRT treatment plans for ethmoid sinus

- cancer computed by advanced treatment planning systems including monte carlo. *Radiotherapy and Oncology: Journal of the European Society for Therapeutic Radiology and Oncology*, 81(3), 250-256. Exclude: Treatment planning
- Palma, D., Vollans, E., James, K., Nakano, S., Moiseenko, V., Shaffer, R., McKenzie, M., Morris, J., & Otto, K. (2008). Volumetric modulated arc therapy for delivery of prostate radiotherapy: Comparison with intensity-modulated radiotherapy and three-dimensional conformal radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 996-1001. Exclude: Treatment planning
- Peinemann, F., Grouven, U., Hemkens, L. G., Bartel, C., Borchers, H., Pinkawa, M., Heidenreich, A., & Sauerland, S. (2010). Low-dose rate brachytherapy for men with localized prostate cancer. *Cochrane Database of Systematic Reviews*, 8 Exclude: Outcomes not specific to IMRT
- Pignol, J. P., Olivotto, I., Rakovitch, E., Gardner, S., Sixel, K., Beckham, W., Vu, T. T., Truong, P., Ackerman, I., & Paszat, L. (2008). A multicenter randomized trial of breast intensity-modulated radiation therapy to reduce acute radiation dermatitis. *Journal of Clinical Oncology : Official Journal of the American Society of Clinical Oncology*, 26(13), 2085-2092. Exclude: Date
- Pollack, A., Hanlon, A. L., Horwitz, E. M., Feigenberg, S. J., Konski, A. A., Movsas, B., Greenberg, R. E., Uzzo, R. G., Ma, C. M., McNeely, S. W., Buyyounouski, M. K., & Price, R. A. (2006). Dosimetry and preliminary acute toxicity in the first 100 men treated for prostate cancer on a randomized hypofractionation dose escalation trial. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 518-526. Exclude: Date
- Pow, E. H., Kwong, D. L., McMillan, A. S., Wong, M. C., Sham, J. S., Leung, L. H., & Leung, W. K. (2006). Xerostomia and quality of life after intensity-modulated radiotherapy vs. conventional radiotherapy for early-stage nasopharyngeal carcinoma: Initial report on a randomized controlled clinical trial. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 981-991. Exclude: Date
- Pow, E. H. N., McMillan, A. S., Leung, W. K., & Wong, M. C. M. (2003). Saliva profile after intensity-modulated and conventional radiotherapy for nasopharyngeal carcinoma (JDR abstract). *Journal of Dental Research*, 82(Special Issue B June) Exclude: Study design (abstract)
- Powell, M., Wells, P., Staffurth, J., Hall, E., Sydenham, M., Tait, D., Dearnaley, D., Bidmead, M., Khoo, V., & Blake, P. (2004). The PIMS trial: A proposed randomised controlled trial of pelvic IMRT for multiple tumour sites [abstract]. *International Journal of Gynecological Cancer*, 14 Suppl 1, 224, Abstrat 810. Exclude: Study design (abstract)
- Qu, Y. Q., He, Y. B., Jiang, X., & Chen, Z. M. (2007). [Clinical value of three dimensional conformal radiation therapy for postoperative cervical cancer]. *Tumor*, 27(9), 737-740. Exclude: Intervention does not include IMRT
- RTOG 0522: A randomized phase III trial of concurrent accelerated radiation and cisplatin versus concurrent accelerated radiation, cisplatin, and cetuximab [followed by surgery for selected patients] for stage III and IV head and neck carcinomas. (2007). *Clinical Advances in Hematology & Oncology : H&O*, 5(2), 79-81. Exclude: Date
- Rudat V, Munter M, Rades D, Gr?tz K, Haberkorn U, Brenner W, and J.?rgen D. The effect of amifostine or IMRT to preserve the parotid function after radiotherapy of the head and neck region measured by quantitative salivary gland scintigraphy. *Radiotherapy & Oncology*, 89(1), 71-80. Exclude: Date
- Saarilahti, K., Kouri, M., Collan, J., Kangasmaki, A., Atula, T., Joensuu, H., & Tenhunen, M. (2006). Sparing of the submandibular glands by intensity modulated radiotherapy in the treatment of head and neck cancer. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 78(3), 270-275. Exclude: Date
- Shen, Z. T., Wu, X. H., Li, B., Wang, L., & and Zhu, X. X. (2010). Clinical study of oxaliplatin combined with intensity modulation radiotherapy in treatment of local advanced nasopharyngeal carcinoma. *Chinese Journal of Cancer Prevention and Treatment*, 17(13), 1018-1020. Exclude: Treatment planning

- Shen, Z. T., Wu, X. H., Li, B., Wang, L., & Zhu, X. X. (2010). [Clinical study of oxaliplatin combined with intensity modulation radiotherapy in treatment of local advanced nasopharyngeal carcinoma] LA: Chi. *Chinese Journal of Cancer Prevention and Treatment*, 17(13), 1018-1020. *Exclude: Treatment planning*
- South, C. P., Khoo, V. S., Naismith, O., Norman, A., & Dearnaley, D. P. (2008). A comparison of treatment planning techniques used in two randomised UK external beam radiotherapy trials for localised prostate cancer. *Clinical Oncology (Royal College of Radiologists (Great Britain))*, 20(1), 15-21. *Exclude: Study size*
- Staffurth, J. N., Hall, E., Powell, M., Khoo, V., Tait, D., Bidmead, M., Dearnley, D., Wells, P., Blake, P., & Sydenham, M. (2004). The PIMS trial: A randomized controlled trial of pelvic IMRT for multiple tumour sites [abstract]. *British Journal of Cancer*, 91 Suppl 1, S24-80, Abstrat P176. *Exclude: Study design (abstract)*
- Strigari, L., Arcangeli, G., Arcangeli, S., & Benassi, M. (2009). Mathematical model for evaluating incidence of acute rectal toxicity during conventional or hypofractionated radiotherapy courses for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 73(5), 1454-1460. *Exclude: Study design (mathematical model)*
- Studer, G., Glanzmann, C., Studer, S. P., Gratz, K. W., Bredell, M., Locher, M., Lutolf, U. M., & Zwahlen, R. A. (2011). Risk-adapted dental care prior to intensity-modulated radiotherapy (IMRT). *Schweizer Monatsschrift Fur Zahnmedizin = Revue Mensuelle Suisse d'Odonto-Stomatologie = Rivista Mensile Svizzera Di Odontologia e Stomatologia / SSO*, 121(3), 216-229. *Exclude: Study design (narrative review of hospital use of IMRT)*
- Su, S. F., Han, F., Zhao, C., Chen, C. Y., Xiao, W. W., Li, J. X., & Lu, T. X. (2011). [The effect of overall treatment time on local control in nasopharyngeal carcinoma patients treated with intensity modulated radiation therapy.]. *Zhonghua Yi Xue Za Zhi*, (91 7), 469-472. *Exclude: Treatment planning*
- Suzuki, M., Nishimura, Y., Nakamatsu, K., Okumura, M., Hashiba, H., Koike, R., Kanamori, S., & Shibata, T. (2006). Analysis of interfractional set-up errors and intrafractional organ motions during IMRT for head and neck tumors to define an appropriate planning target volume (PTV)- and planning organs at risk volume (PRV)- margins. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 78(3), 283-290. *Exclude: Treatment planning*
- Teguh, D. N., Levendag, P. C., Noever, I., van Rooij, P., Voet, P., van der Est, H., Sipkema, D., Sewnaik, A., Baatenburg de Jong, R. J., de la Bije, D., & Schmitz, P. I. (2008). Treatment techniques and site considerations regarding dysphagia-related quality of life in cancer of the oropharynx and nasopharynx. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1119-1127. *Exclude: Treatment planning*
- Thongphiew, D., Wu, Q. J., Lee, W. R., Chankong, V., Yoo, S., McMahon, R., & Yin, F. F. (2009). Comparison of online IGRT techniques for prostate IMRT treatment: Adaptive vs repositioning correction. *Medical Physics*, 36(5), 1651-1662. *Exclude: Study size*
- Timke, C., Winnenthal, H. S., Klug, F., Roeder, F. F., Bonertz, A., Reissfelder, C., Rochet, N., Koch, M., Tjaden, C., Buechler, M. W., Debus, J., Werner, J., Beckhove, P., Weitz, J., & Huber, P. E. (2011). Randomized controlled phase I/II study to investigate immune stimulatory effects by low dose radiotherapy in primarily operable pancreatic cancer. *BMC Cancer*, 11, 134. *Exclude: Study design (description of clinical trial)*
- Treutwein, M., Hipp, M., Kolbl, O., & Bogner, L. (2009). IMRT of prostate cancer: A comparison of fluence optimization with sequential segmentation and direct step-and-shoot optimization. *Strahlentherapie Und Onkologie: Organ Der Deutschen Rontgengesellschaft ...[Et Al]*, 185(6), 379-383. *Exclude: Study size*
- Vaarkamp, J., Malde, R., Dixit, S., & Hamilton, C. S. (2009). A comparison of conformal and intensity modulated treatment planning techniques for early prostate cancer. *Journal of Medical Imaging and Radiation Oncology*, 53(3), 310-317. *Exclude: Study size*
- Vanderstraeten, B., Reynaert, N., Paelinck, L., Madani, I., De Wagter, C., De Gersem, W., De Neve, W., & Thierens, H. (2006). Accuracy of patient dose calculation for lung IMRT: A comparison of monte carlo, convolution/superposition, and pencil beam computations. *Medical Physics*, 33(9), 3149-3158. *Exclude: Treatment planning*

- Vanetti, E., Clivio, A., Nicolini, G., Fogliata, A., GhoshLaskar, S., Agarwal, J. P., Upreti, R. R., Budrukkar, A., Murthy, V., Deshpande, D. D., Shrivastava, S. K., Dinshaw, K. A., & Cozzi, L. (2009). Volumetric modulated arc radiotherapy for carcinomas of the oro-pharynx, hypo-pharynx and larynx: A treatment planning comparison with fixed field IMRT. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*, 92(1), 111-117. *Exclude: Treatment planning*
- Vevec, M., Hwang, D., Waldron, J. N., O'Sullivan, B., Bayley, A., Cummings, B., Kim, J. J., Ringash, J., Breen, S. L., Johnson, L., Lockwood, G., & Dawson, L. A. (2007). Randomized trial evaluating inter- and intra-fraction setup error of two thermoplastic masks for head and neck cancer IMRT evaluated with cone-beam CT image guidance. *Radiother Oncol*, 84, 86. *Exclude: Study design (conference abstract)*
- Vevec, M., Waldron, J. N., O'Sullivan, B., Bayley, A., Cummings, B., Kim, J. J., Ringash, J., Breen, S. L., Lockwood, G. A., & Dawson, L. A. (2010). Cone-beam CT assessment of interfraction and intrafraction setup error of two head-and-neck cancer thermoplastic masks. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 949-955. *Exclude: Treatment planning*
- Venteicher, A. S., & Patil, C. G. (2011). Early versus delayed radiotherapy for the treatment of low-grade gliomas. *Cochrane Database of Systematic Reviews*, 8 *Exclude: Study design (study protocol)*
- Vyas, R., Nandwani Patel, P., & Patil, R. (01104). Comparative study of IMRT vs. conventional radiotherapy with amifostine for preservation of parotid function in patients with head and neck cancer. *International Journal of Radiation Oncology Biology Physics.Conference: 52nd Annual Meeting of the American Society for Radiation Oncology San Diego, CA United States.Conference Start*, , 20101031 Conferene En: 201-2010. *Exclude: Study design (conference abstract)*
- Wahab, S. H., Malyapa, R. S., Mutic, S., Grigsby, P. W., Deasy, J. O., Miller, T. R., Zoberi, I., & Low, D. A. (2004). A treatment planning study comparing HDR and AGIMRT for cervical cancer. *Medical Physics*, 31(4), 734-743. *Exclude: Treatment planning*
- Wang, R., Wu, F., Wang, D., & Liu, K. (2008). Clinical effect of brafine in preventing and treating radioactive skin destruction of nasopharyngeal carcinoma patients caused by concurrent intensity-modulated radiotherapy and chemotherapy. *Chinese Journal of Clinical Oncology*, 5(1), 58-63. *Exclude: Intervention not of interest (brafine)*
- Wang, S. Z., Li, J., Miyamoto, C. T., Chen, F., Zhou, L. F., Zhang, H. Y., Yang, G., Wang, W. F., Guo, M., Ni, X. C., & Wang, L. (2009). A study of middle ear function in the treatment of nasopharyngeal carcinoma with IMRT technique. *Radiother Oncol.[Epub Ahead of Print]p,Exclude: Treatment planning*
- Wang, W. H., Tsuji, H., Ishikawa, H., Tsujii, H., Kamada, T., Mizoe, J., & Li, Y. X. (2006). [Comparison of treatment planning by carbon ion radiotherapy and by intensity-modulated radiotherapy for prostatic adenocarcinoma]. *Zhonghua Zhong Liu Za Zhi [Chinese Journal of Oncology]*, 28(11), 836-839. *Exclude: Date*
- Wirth, L. J., Allen, A. M., Posner, M. R., Haddad, R. I., Li, Y., Clark, J. R., Busse, P. M., Chan, A. W., Goguen, L. A., Norris, C. M., Annino, D. J., & Tishler, R. B. (2010). Phase I dose-finding study of paclitaxel with panitumumab, carboplatin and intensity-modulated radiotherapy in patients with locally advanced squamous cell cancer of the head and neck. *Annals of Oncology*, 21(2) *Exclude: Study size*
- Worthy, D., & Wu, Q. (2010). Dosimetric assessment of rigid setup error by CBCT for HN-IMRT. *Journal of Applied Clinical Medical Physics / American College of Medical Physics*, 11(3), 3187. *Exclude: Treatment planning*
- Yarnold, J., Donovan, E., Bleackley, N., Reise, S., Peckitt, C., & Patel, S. (2005). Randomised trial of standard 2D radiotherapy (RT) versus 3D intensity modulated radiotherapy (IMRT) in patients prescribed breast radiotherapy. *European Journal of Cancer*, 3(2), 390. *Exclude: Study design (abstract)*
- Yuen, J., Rodrigues, G., Trenka, K., Coad, T., Yartsev, S., D'Souza, D., Lock, M., & Bauman, G. (2008). Comparing two strategies of dynamic intensity modulated radiation therapy (dIMRT) with 3-dimensional conformal radiation

therapy (3DCRT) in the hypofractionated treatment of high-risk prostate cancer. *Radiation Oncology*, 3, 1.

*Exclude: Treatment planning*

Zhang, Y., Lin, J., Zhou, W., Tang, J., & Liao, Y. [Dosimetric verification and clinical efficacy of intensity modulated radiotherapy in nasopharyngeal carcinoma]. *Zhong Nan Da Xue Xue Bao. Medical Sciences* 34(9):2009,

*Exclude: Language (Chinese)*

Zhao, D., Liu, X. J., Xie, Q., Huang, Z. P., Zou, B. X., & Ge, Y. B. (2006). [Intensity-modulated radiation combined with delisheng injection for nasopharyngeal carcinoma]. *Nan Fang Yi Ke Da Xue Xue Bao = Journal of Southern*

*Medical University*, 26(6), 874-875. *Exclude: Language (Chinese)*

## MEDLINE®

Abate, A., Pressello, M. C., Benassi, M., & Strigari, L. (2009). Comparison of IMRT planning with two-step and one-step optimization: A strategy for improving therapeutic gain and reducing the integral dose. *Physics in Medicine & Biology*, 54(23), 7183-7198. *Exclude: Study size*

Abo-Madyan, Y., Polednik, M., Rahn, A., Schneider, F., Dobler, B., Wenz, F., & Lohr, F. (2008). Improving dose homogeneity in large breasts by IMRT: Efficacy and dosimetric accuracy of different techniques.

*Strahlentherapie Und Onkologie*, 184(2), 86-92. : *Study size*

Adams, E. J., & Warrington, A. P. (2008). A comparison between cobalt and linear accelerator-based treatment plans for conformal and intensity-modulated radiotherapy. *British Journal of Radiology*, 81(964), 304-310.

*Exclude: Study size*

Adkison, J. B., & Mehta, M. (2010). Radiographic pneumonitis patterns and low pulmonary toxicity after helical tomotherapy. *AJR. American Journal of Roentgenology*, 194(5), W459. *Exclude: Study design (letter)*

Adli, M., Mayr, N. A., Kaiser, H. S., Skwarchuk, M. W., Meeks, S. L., Mardirossian, G., . . . Buatti, J. M. (2003). Does prone positioning reduce small bowel dose in pelvic radiation with intensity-modulated radiotherapy for gynecologic cancer?. *International Journal of Radiation Oncology, Biology, Physics*, 57(1), 230-238. *Exclude: Sample size*

Agazaryan, N., & Solberg, T. D. (2003). Segmental and dynamic intensity-modulated radiotherapy delivery techniques for micro-multileaf collimator. *Medical Physics*, 30(7), 1758-1767. *Exclude: Treatment planning*

Agazaryan, N., Solberg, T. D., & DeMarco, J. J. (2003). Patient specific quality assurance for the delivery of intensity modulated radiotherapy. *Journal of Applied Clinical Medical Physics*, 4(1), 40-50. *Exclude: Treatment planning*

Ahamad, A., D'Souza, W., Salehpour, M., Iyer, R., Tucker, S. L., Jhingran, A., & Eifel, P. J. (2005). Intensity-modulated radiation therapy after hysterectomy: Comparison with conventional treatment and sensitivity of the normal-tissue-sparing effect to margin size. *International Journal of Radiation Oncology, Biology, Physics*, 62(4), 1117-1124. *Exclude: Study size*

Ahmed, R. S., Ove, R., Duan, J., Popple, R., & Cobb, G. B. (2006). Intensity-modulated radiotherapy (IMRT) for carcinoma of the maxillary sinus: A comparison of IMRT planning systems. *Medical Dosimetry*, 31(3), 224-232. *Exclude: Treatment planning*

Ahn, P. H., Ahn, A. I., Lee, C. J., Shen, J., Miller, E., Lukaj, A., . . . Garg, M. K. (2009). Random positional variation among the skull, mandible, and cervical spine with treatment progression during head-and-neck radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 626-633. *Exclude: Treatment planning*

Ahn, P. H., & Garg, M. K. (2008). Positron emission tomography/computed tomography for target delineation in head and neck cancers. *Seminars in Nuclear Medicine*, 38(2), 141-148. *Exclude: Date*

Ahunbay, E. E., Chen, G. P., Thatcher, S., Jursinic, P. A., White, J., Albano, K., & Li, X. A. (2007). Direct aperture optimization-based intensity-modulated radiotherapy for whole breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 67(4), 1248-1258. *Exclude: Study size*

- Ailleres, N., Azria, D., Thezenas, S., Barbier, N., Fenoglietto, P., Delard, R., . . . Dubois, J. B. (2004). [Pilot study of conformal intensity modulated radiation therapy for localized prostate cancer]. *Cancer Radiotherapie*, 8(2), 59-69. *Exclude: Study size*
- Aizer, A. A., Anderson, N. S., Oh, S. C., Yu, J. B., McKeon, A. M., Decker, R. H., & Peschel, R. E. (2011). The impact of pretreatment prostate volume on severe acute genitourinary toxicity in prostate cancer patients treated with intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 79(2), 379-384. *Exclude: Outcome not of interest (prostate volume)*
- Aizer, A. A., Yu, J. B., Colberg, J. W., McKeon, A. M., Decker, R. H., & Peschel, R. E. (2009). Radical prostatectomy vs. intensity-modulated radiation therapy in the management of localized prostate adenocarcinoma. *Radiotherapy & Oncology*, 93(2), 185-191. *Exclude: Comparator not of interest (radical prostatectomy)*
- Aizer, A. A., Yu, J. B., McKeon, A. M., Decker, R. H., Colberg, J. W., & Peschel, R. E. (2009). Whole pelvic radiotherapy versus prostate only radiotherapy in the management of locally advanced or aggressive prostate adenocarcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1344-1349. *Exclude: Comparator not of interest (whole pelvis radiation)*
- Alaei, P., Higgins, P. D., Weaver, R., & Nguyen, N. (2004). Comparison of dynamic and step-and-shoot intensity-modulated radiation therapy planning and delivery. *Medical Dosimetry*, 29(1), 1-6. *Exclude: Study size*
- Alani, S., Soyfer, V., Strauss, N., Schifter, D., & Corn, B. W. (2009). Limited advantages of intensity-modulated radiotherapy over 3D conformal radiation therapy in the adjuvant management of gastric cancer. *International Journal of Radiation Oncology, Biology, Physics*, 74(2), 562-566. *Exclude: Study size*
- Albertini, F., Bolsi, A., Lomax, A. J., Rutz, H. P., Timmerman, B., & Goitein, G. (2008). Sensitivity of intensity modulated proton therapy plans to changes in patient weight. *Radiotherapy & Oncology*, 86(2), 187-194. *Exclude: Study size*
- Alektiar, K. M., Brennan, M. F., Healey, J. H., & Singer, S. (2008). Impact of intensity-modulated radiation therapy on local control in primary soft-tissue sarcoma of the extremity. *Journal of Clinical Oncology*, 26(20), 3440-3444. *Exclude: Study updated in 2011*
- Alexander, M. A., Brooks, W. A., & Blake, S. W. (2007). Normal tissue complication probability modelling of tissue fibrosis following breast radiotherapy. *Physics in Medicine & Biology*, 52(7), 1831-1843. *Exclude: Treatment planning*
- Allen, A. M., Czermanska, M., Janne, P. A., Sugarbaker, D. J., Bueno, R., Harris, J. R., . . . Baldini, E. H. (2006). Fatal pneumonitis associated with intensity-modulated radiation therapy for mesothelioma. *International Journal of Radiation Oncology, Biology, Physics*, 65(3), 640-645. *Exclude: Study size*
- Al-Mamgani, A., Heemsbergen, W. D., Peeters, S. T., & Lebesque, J. V. (2009). Role of intensity-modulated radiotherapy in reducing toxicity in dose escalation for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 73(3), 685-691. *Exclude: Included in De Neve (2012)*
- Al-Mamgani, A., Tans, L., Teguh, D. N., van Rooij, P., Zwijnenburg, E. M., & Levendag, P. C. (2012). Stereotactic body radiotherapy: A promising treatment option for the boost of oropharyngeal cancers not suitable for brachytherapy: A single-institutional experience. *International Journal of Radiation Oncology, Biology, Physics*, 82(4), 1494-1500. *Exclude: Intervention not of interest (SBRT)*
- Alongi, F., Fiorino, C., Cozzarini, C., Broggi, S., Perna, L., Cattaneo, G. M., . . . Di Muzio, N. (2009). IMRT significantly reduces acute toxicity of whole-pelvis irradiation in patients treated with post-operative adjuvant or salvage radiotherapy after radical prostatectomy. *Radiotherapy & Oncology*, 93(2), 207-212. *Exclude: Included in De Neve (2012)*
- Alvarez-Moret, J., Pohl, F., Koelbl, O., & Dobler, B. (2010). Evaluation of volumetric modulated arc therapy (VMAT) with oncentra MasterPlan[REGISTERED] for the treatment of head and neck cancer. *Radiation Oncology*, 5, 110. *Exclude: Treatment planning*



- Ahamad, A., Stevens, C. W., Smythe, W. R., Liao, Z., Vaporciyan, A. A., Rice, D., . . . Forster, K. M. (2003). Promising early local control of malignant pleural mesothelioma following postoperative intensity modulated radiotherapy (IMRT) to the chest. *Cancer Journal*, 9(6), 476-484. *Exclude: Included in Veldman (2008)*
- Alektiar, K. M., Brennan, M. F., & Singer, S. (2011). Local control comparison of adjuvant brachytherapy to intensity-modulated radiotherapy in primary high-grade sarcoma of the extremity. *Cancer*, 117(14), 3229-3234. *Comparator not of interest (brachytherapy)*
- Amirul Islam, M., Yanagi, T., Mizoe, J. E., Mizuno, H., & Tsujii, H. (2008). Comparative study of dose distribution between carbon ion radiotherapy and photon radiotherapy for head and neck tumor. *Radiation Medicine*, 26(7), 415-421. *Exclude: Study size*
- Amosson, C. M., Teh, B. S., Van, T. J., Uy, N., Huang, E., Mai, W. Y., . . . Butler, E. B. (2003). Dosimetric predictors of xerostomia for head-and-neck cancer patients treated with the smart (simultaneous modulated accelerated radiation therapy) boost technique. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 136-144. *Exclude: Date*
- Anand, A. K., Jain, J., Negi, P. S., Chaudhoory, A. R., Sinha, S. N., Choudhury, P. S., . . . Munjal, R. K. (2006). Can dose reduction to one parotid gland prevent xerostomia?--A feasibility study for locally advanced head and neck cancer patients treated with intensity-modulated radiotherapy. *Clinical Oncology (Royal College of Radiologists)*, 18(6), 497-504. *Exclude: Study size*
- Anderson, J. W., Symonds-Tayler, R., Hartmann, G., Echner, G., Lang, C., Schlegel, W., & Webb, S. (2006). Comparative efficiency of the multi-leaf collimator and variable-aperture collimator in intensity-modulated radiotherapy. *Physics in Medicine & Biology*, 51(7), 1725-1736. *Exclude: Treatment planning*
- Anderson, J. W., Symonds-Tayler, R., & Webb, S. (2006). Investigating the fundamentals of IMRT decomposition using ten simple collimator models. *Physics in Medicine & Biology*, 51(9), 2225-2236. *Exclude: Treatment planning*
- Andrews, G., Lango, M., Cohen, R., Feigenberg, S., Burtness, B., Mehra, R., . . . Ridge, J. A. (2011). Nonsurgical management of oropharyngeal, laryngeal, and hypopharyngeal cancer: The fox chase cancer center experience. *Head & Neck*, 33(10), 1433-1440. *Exclude: Study design (narrative review of institution cases)*
- Anjum, M. N., Parker, W., Ruo, R., & Afzal, M. (2010). Evaluation criteria for film based intensity modulated radiation therapy quality assurance. *Physica Medica*, 26(1), 38-43. *Exclude: Treatment planning*
- Anjum, M. N., Parker, W., Ruo, R., Aldahlawi, I., & Afzal, M. (2010). IMRT quality assurance using a second treatment planning system. *Medical Dosimetry*, 35(4), 274-279. *Exclude: Treatment planning*
- Arbea, L., Ramos, L. I., Martinez-Monge, R., Moreno, M., & Aristu, J. (2010). Intensity-modulated radiation therapy (IMRT) vs. 3D conformal radiotherapy (3DCRT) in locally advanced rectal cancer (LARC): Dosimetric comparison and clinical implications. *Radiation Oncology*, 5, 17. *Exclude: Study size*
- Arcangeli, S., Saracino, B., Petrongari, M. G., Gomellini, S., Marzi, S., Landoni, V., . . . Arcangeli, G. (2007). Analysis of toxicity in patients with high risk prostate cancer treated with intensity-modulated pelvic radiation therapy and simultaneous integrated dose escalation to prostate area. *Radiotherapy & Oncology*, 84(2), 148-155. *Exclude: Date*
- Archambault, L., Arseneault, J., Gingras, L., Beddar, A. S., Roy, R., & Beaulieu, L. (2005). Plastic scintillation dosimetry: Optimal selection of scintillating fibers and scintillators. *Medical Physics*, 32(7), 2271-2278. *Exclude: Treatment planning*
- Ares, C., Khan, S., Macartain, A. M., Heuberger, J., Goitein, G., Gruber, G., . . . Lomax, A. J. (2010). Postoperative proton radiotherapy for localized and locoregional breast cancer: Potential for clinically relevant improvements?. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 685-697. *Exclude: Treatment planning*

- Ashenafi, M., Boyd, R. A., Lee, T. K., Lo, K. K., Gibbons, J. P., Rosen, I. I., . . . Hogstrom, K. R. (2010). Feasibility of postmastectomy treatment with helical TomoTherapy. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 836-842. *Exclude: Study size*
- Askoxyiakakis, V., Jensen, A. D., Hafner, M. F., Fetzner, L., Sterzing, F., Heil, J., . . . Hof, H. (2011). Simultaneous integrated boost for adjuvant treatment of breast cancer--intensity modulated vs. conventional radiotherapy: The IMRT-MC2 trial. *BMC Cancer*, 11, 249. *Exclude: Study design (description of an upcoming clinical trial)*
- Askoxyiakakis, V., Zabel-du Bois, A., Schlegel, W., Debus, J., Huber, P., & Milker-Zabel, S. (2010). Patterns of failure after stereotactic radiotherapy of intracranial meningioma. *Journal of Neuro-Oncology*, 98(3), 367-372. *Exclude: Intervention not of interest (stereotactic radiation therapy)*
- Athar, B. S., Bednarz, B., Seco, J., Hancox, C., & Paganetti, H. (2010). Comparison of out-of-field photon doses in 6 MV IMRT and neutron doses in proton therapy for adult and pediatric patients. *Physics in Medicine & Biology*, 55(10), 2879-2891. *Exclude: Treatment planning*
- Athar, B. S., & Paganetti, H. (2011). Comparison of second cancer risk due to out-of-field doses from 6-MV IMRT and proton therapy based on 6 pediatric patient treatment plans. *Radiotherapy & Oncology*, 98(1), 87-92. *Exclude: Study size*
- Auberger, T., Seydl, K., Futschek, T., Sztankay, A., Sweeney, R. A., & Lukas, P. (2007). Photons or protons: Precision radiotherapy of lung cancer. *Strahlentherapie Und Onkologie*, 183(Spec 2), 3-6. *Exclude: Study size*
- Ayyangar, K. M., Fung, A. Y., Li, S., Pillai, S., Yoe-Sein, M. M., Zhen, W., & Enke, C. A. (2005). Dose volume histogram comparison between ADAC pinnacle and nomos corvus systems for IMRT. *Australasian Physical & Engineering Sciences in Medicine*, 28(1), 1-7. *Exclude: Study size*
- Bakai, A., Alber, M., & Nusslin, F. (2003). Estimation of a radiation time prolongation factor for intensity-modulated radiotherapy. *Physics in Medicine & Biology*, 48(2), N25-9. *Exclude: Treatment planning*
- Baker, S. J., Budgell, G. J., & MacKay, R. I. (2005). Use of an amorphous silicon electronic portal imaging device for multileaf collimator quality control and calibration. *Physics in Medicine & Biology*, 50(7), 1377-1392. *Exclude: Treatment planning*
- Bakst, R. L., Lee, N., Pfister, D. G., Zelefsky, M. J., Hunt, M. A., Kraus, D. H., & Wolden, S. L. (2011). Hypofractionated dose-painting intensity modulated radiation therapy with chemotherapy for nasopharyngeal carcinoma: A prospective trial. *International Journal of Radiation Oncology, Biology, Physics*, 80(1), 148-153. *Exclude: Study size*
- Ballonoff, A., Kavanagh, B., McCarter, M., Kane, M., Pearlman, N., Nash, R., . . . Schefter, T. E. (2008). Preoperative capecitabine and accelerated intensity-modulated radiotherapy in locally advanced rectal cancer: A phase II trial. *American Journal of Clinical Oncology*, 31(3), 264-270. *Exclude: Study size*
- Balog, J., Lucas, D., DeSouza, C., & Crilly, R. (2005). Helical tomotherapy radiation leakage and shielding considerations. *Medical Physics*, 32(3), 710-719. *Exclude: Treatment planning*
- Bar Ad, V., Weinstein, G., Dutta, P. R., Chalian, A., Both, S., & Quon, H. (2010). Gabapentin for the treatment of pain related to radiation-induced mucositis in patients with head and neck tumors treated with intensity-modulated radiation therapy. *Head & Neck*, 32(2), 173-177. *Exclude: Intervention not of interest (gabapentin)*
- Bar, W., Schwarz, M., Alber, M., Bos, L. J., Mijnheer, B. J., Rasch, C., . . . Damen, E. M. (2003). A comparison of forward and inverse treatment planning for intensity-modulated radiotherapy of head and neck cancer. *Radiotherapy & Oncology*, 69(3), 251-258. *Exclude: Study size*
- Barbiere, J., Chan, M. F., Mechalakos, J., Cann, D., Schupak, K., & Burman, C. (2002). A parameter optimization algorithm for intensity-modulated radiotherapy prostate treatment planning. *Journal of Applied Clinical Medical Physics*, 3(3), 227-234. *Exclude: Date*

- Barnett, G. C., Coles, C. E., Elliott, R. M., Baynes, C., Luccarini, C., Conroy, D., . . . West, C. M. (2012). Independent validation of genes and polymorphisms reported to be associated with radiation toxicity: A prospective analysis study. *Lancet Oncology*, *13*(1), 65-77. : *Outcome not of interest (genes)*
- Barnett, G. C., West, C. M., Coles, C. E., Pharoah, P. D., Talbot, C. J., Elliott, R. M., . . . Bentzen, S. M. (2012). Standardized total average toxicity score: A scale- and grade-independent measure of late radiotherapy toxicity to facilitate pooling of data from different studies. *International Journal of Radiation Oncology, Biology, Physics*, *82*(3), 1065-1074. *Exclude: Intervention not of interest (standardized total average toxicity score)*
- Barnett, G. C., Wilkinson, J., Moody, A. M., Wilson, C. B., Sharma, R., Klager, S., . . . Coles, C. E. (2009). A randomised controlled trial of forward-planned radiotherapy (IMRT) for early breast cancer: Baseline characteristics and dosimetry results. *Radiotherapy & Oncology*, *92*(1), 34-41. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Barnett, G. C., Wilkinson, J. S., Moody, A. M., Wilson, C. B., Twyman, N., Wishart, G. C., . . . Coles, C. E. (2012). Randomized controlled trial of forward-planned intensity modulated radiotherapy for early breast cancer: Interim results at 2 years. *International Journal of Radiation Oncology, Biology, Physics*, *82*(2), 715-723. *Exclude: Included in Hayes (2012b)*
- Barney, B. M., Lee, R. J., Handrahan, D., Welsh, K. T., Cook, J. T., & Sause, W. T. (2011). Image-guided radiotherapy (IGRT) for prostate cancer comparing kV imaging of fiducial markers with cone beam computed tomography (CBCT). *International Journal of Radiation Oncology, Biology, Physics*, *80*(1), 301-305. *Exclude: Treatment planning*
- Basran, P. S., Balogh, J., Poon, I., MacKenzie, R., & Chan, T. (2011). On comparing the quality of head and neck IMRT plans delivered with two different linear accelerator manufacturers. *Medical Dosimetry*, *36*(1), 75-80. *Exclude: Treatment planning*
- Bastasch, M. D., Teh, B. S., Mai, W. Y., Carpenter, L. S., Lu, H. H., Chiu, J. K., . . . Butler, E. B. (2002). Post-nerve-sparing prostatectomy, dose-escalated intensity-modulated radiotherapy: Effect on erectile function. *International Journal of Radiation Oncology, Biology, Physics*, *54*(1), 101-106. *Exclude: Date*
- Bates, A. T., Swift, C. L., Kwa, W., Moravan, V., & Aquino-Parsons, C. (2007). A computed tomography-based protocol vs conventional clinical mark-up for breast electron boost. *Clinical Oncology (Royal College of Radiologists)*, *19*(5), 349-355. *Exclude: Treatment planning*
- Bates, E. L., Bragg, C. M., Wild, J. M., Hatton, M. Q., & Ireland, R. H. (2009). Functional image-based radiotherapy planning for non-small cell lung cancer: A simulation study. *Radiotherapy & Oncology*, *93*(1), 32-36. *Exclude: Study size*
- Baum, C., Alber, M., Birkner, M., & Nusslin, F. (2004). Treatment simulation approaches for the estimation of the distributions of treatment quality parameters generated by geometrical uncertainties. *Physics in Medicine & Biology*, *49*(24), 5475-5488. *Exclude: Treatment planning*
- Baumert, B. G., Norton, I. A., & Davis, J. B. (2003). Intensity-modulated stereotactic radiotherapy vs. stereotactic conformal radiotherapy for the treatment of meningioma located predominantly in the skull base. *International Journal of Radiation Oncology, Biology, Physics*, *57*(2), 580-592. *Exclude: Sample size*
- Baumert, B. G., Norton, I. A., Lomax, A. J., & Davis, J. B. (2004). Dose conformation of intensity-modulated stereotactic photon beams, proton beams, and intensity-modulated proton beams for intracranial lesions. *International Journal of Radiation Oncology, Biology, Physics*, *60*(4), 1314-1324. *Exclude: Study size*
- Bayley, A., Rosewall, T., Craig, T., Bristow, R., Chung, P., Gospodarowicz, M., . . . Catton, C. (2010). Clinical application of high-dose, image-guided intensity-modulated radiotherapy in high-risk prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, *77*(2), 477-483. *Exclude: Treatment planning*
- Bayouth, J. E., & Morrill, S. M. (2003). MLC dosimetric characteristics for small field and IMRT applications. *Medical Physics*, *30*(9), 2545-2552. *Exclude: Treatment planning*

- Bedford, J. L. (2009). Treatment planning for volumetric modulated arc therapy. *Medical Physics*, 36(11), 5128-5138. *Exclude: Study size*
- Bedford, J. L., Childs, P. J., Hansen, V. N., Warrington, A. P., Mendes, R. L., & Glees, J. P. (2005). Treatment of extensive scalp lesions with segmental intensity-modulated photon therapy. *International Journal of Radiation Oncology, Biology, Physics*, 62(5), 1549-1558. *Exclude: Treatment planning*
- Bedford, J. L., Henrys, A. J., Dearnaley, D. P., & Khoo, V. S. (2005). Treatment planning evaluation of non-coplanar techniques for conformal radiotherapy of the prostate. *Radiotherapy & Oncology*, 75(3), 287-292. *Exclude: Treatment planning*
- Bedford, J. L., & Warrington, A. P. (2009). Commissioning of volumetric modulated arc therapy (VMAT). *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 537-545. *Exclude: Treatment planning*
- Bednarz, B., Athar, B., & Xu, X. G. (2010). A comparative study on the risk of second primary cancers in out-of-field organs associated with radiotherapy of localized prostate carcinoma using monte carlo-based accelerator and patient models. *Medical Physics*, 37(5), 1987-1994. *Exclude: Treatment planning*
- Bednarz, G., Michalski, D., Anne, P. R., & Valicenti, R. K. (2004). Inverse treatment planning using volume-based objective functions. *Physics in Medicine & Biology*, 49(12), 2503-2514. *Exclude: Treatment planning*
- Bednarz, G., Michalski, D., Houser, C., Huq, M. S., Xiao, Y., Anne, P. R., & Galvin, J. M. (2002). The use of mixed-integer programming for inverse treatment planning with pre-defined field segments. *Physics in Medicine & Biology*, 47(13), 2235-2245. *Exclude: Treatment planning*
- Bekelman, J. E., Wolden, S., & Lee, N. (2009). Head-and-neck target delineation among radiation oncology residents after a teaching intervention: A prospective, blinded pilot study. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 416-423. *Exclude: Treatment planning*
- Bekiroglu, F., Ghazali, N., Laycock, R., Katre, C., Lowe, D., & Rogers, S. N. (2011). Adjuvant radiotherapy and health-related quality of life of patients at intermediate risk of recurrence following primary surgery for oral squamous cell carcinoma. *Oral Oncology*, 47(10), 967-973. *Exclude: Intervention not of interest (external beam only)*
- Beltran, C., Gray, J., & Merchant, T. E. (2012). Intensity-modulated arc therapy for pediatric posterior fossa tumors. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), e299-304. *Exclude: Study size*
- Beltran, C., Krasin, M. J., & Merchant, T. E. (2011). Inter- and intrafractional positional uncertainties in pediatric radiotherapy patients with brain and head and neck tumors. *International Journal of Radiation Oncology, Biology, Physics*, 79(4), 1266-1274. *Exclude: Treatment planning*
- Beltran, C., Naik, M., & Merchant, T. E. (2010). Dosimetric effect of setup motion and target volume margin reduction in pediatric ependymoma. *Radiotherapy & Oncology*, 96(2), 216-222. *Exclude: Treatment planning*
- Beltran, C., Pai Panandiker, A. S., Krasin, M. J., & Merchant, T. E. (2010). Daily image-guided localization for neuroblastoma. *Journal of Applied Clinical Medical Physics*, 11(4), 3388. *Exclude: Study size*
- Beltran, C., Roca, M., & Merchant, T. E. (2012). On the benefits and risks of proton therapy in pediatric craniopharyngioma. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), e281-7. *Exclude: Study size*
- Ben-David, M. A., Diamante, M., Radawski, J. D., Vineberg, K. A., Stroup, C., Murdoch-Kinch, C. A., . . . Eisbruch, A. (2007). Lack of osteoradionecrosis of the mandible after intensity-modulated radiotherapy for head and neck cancer: Likely contributions of both dental care and improved dose distributions. *International Journal of Radiation Oncology, Biology, Physics*, 68(2), 396-402. *Exclude: Date*
- Ben-Josef, E., Shields, A. F., Vaishampayan, U., Vaitkevicius, V., El-Rayes, B. F., McDermott, P., . . . Philip, P. A. (2004). Intensity-modulated radiotherapy (IMRT) and concurrent capecitabine for pancreatic cancer. *International Journal of Radiation Oncology, Biology, Physics*, 59(2), 454-459. *Exclude: Study size*

- Bentzen, S. M. (2005). Radiation therapy: Intensity modulated, image guided, biologically optimized and evidence based. *Radiotherapy & Oncology*, 77(3), 227-230. *Exclude: Study design (editorial)*
- Berg, A., Pernkopf, M., Waldhausl, C., Schmidt, W., & Moser, E. (2004). High resolution MR based polymer dosimetry versus film densitometry: A systematic study based on the modulation transfer function approach. *Physics in Medicine & Biology*, 49(17), 4087-4108. *Exclude: Treatment planning*
- Bergman, A. M., Otto, K., & Duzenli, C. (2004). The use of modified single pencil beam dose kernels to improve IMRT dose calculation accuracy. *Medical Physics*, 31(12), 3279-3287. *Exclude: Treatment planning*
- Beriwal, S., Coon, D., Heron, D. E., Kelley, J. L., Edwards, R. P., Sukumvanich, P., . . . Krivak, T. C. (2008). Preoperative intensity-modulated radiotherapy and chemotherapy for locally advanced vulvar carcinoma. *Gynecologic Oncology*, 109(2), 291-295. *Exclude: Study size*
- Beriwal, S., Heron, D. E., Kim, H., King, G., Shogan, J., Bahri, S., . . . Edwards, R. P. (2006). Intensity-modulated radiotherapy for the treatment of vulvar carcinoma: A comparative dosimetric study with early clinical outcome. *International Journal of Radiation Oncology, Biology, Physics*, 64(5), 1395-1400. *Exclude: Study size*
- Berman, A. T., & Rengan, R. (2008). New approaches to radiotherapy as definitive treatment for inoperable lung cancer. *Seminars in Thoracic & Cardiovascular Surgery*, 20(3), 188-197. *Exclude: Study design (narrative review)*
- Bernier, J., & Bentzen, S. M. (2006). Radiotherapy for head and neck cancer: Latest developments and future perspectives. *Current Opinion in Oncology*, 18(3), 240-246. *Exclude: Study design (narrative review)*
- Bertelsen, A., Hansen, C. R., Johansen, J., & Brink, C. (2010). Single arc volumetric modulated arc therapy of head and neck cancer. *Radiotherapy & Oncology*, 95(2), 142-148. *Exclude: Treatment planning*
- Bertelsen, A., Lorenzen, E. L., & Brink, C. (2011). Validation of a new control system for Elekta accelerators facilitating continuously variable dose rate. *Medical Physics*, 38(8), 4802-4810. *Exclude: Treatment planning*
- Bertelsen, A., Schytte, T., Bentzen, S. M., Hansen, O., Nielsen, M., & Brink, C. (2011). Radiation dose response of normal lung assessed by cone beam CT - a potential tool for biologically adaptive radiation therapy. *Radiotherapy & Oncology*, 100(3), 351-355. *Exclude: Treatment planning*
- Bhatnagar, A., & Deutsch, M. (2006). The role for intensity modulated radiation therapy (IMRT) in pediatric population. *Technology in Cancer Research & Treatment*, 5(6), 591-595. *Exclude: Treatment planning*
- Bhatnagar, A. K., Brandner, E., Sonnik, D., Wu, A., Kalnicki, S., Deutsch, M., & Heron, D. E. (2004). Intensity-modulated radiation therapy (IMRT) reduces the dose to the contralateral breast when compared to conventional tangential fields for primary breast irradiation: Initial report. *Cancer Journal*, 10(6), 381-385. *Exclude: Treatment planning*
- Bhatnagar, A. K., Brandner, E., Sonnik, D., Wu, A., Kalnicki, S., Deutsch, M., & Heron, D. E. (2006). Intensity modulated radiation therapy (IMRT) reduces the dose to the contralateral breast when compared to conventional tangential fields for primary breast irradiation. *Breast Cancer Research & Treatment*, 96(1), 41-46. *Exclude: Treatment planning*
- Bhide, S. A., Davies, M., Burke, K., McNair, H. A., Hansen, V., Barbachano, Y., . . . Nutting, C. M. (2010). Weekly volume and dosimetric changes during chemoradiotherapy with intensity-modulated radiation therapy for head and neck cancer: A prospective observational study. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1360-1368. *Exclude: Outcome not of interest (tumor volume changes)*
- Bhide, S. A., & Nutting, C. M. (2010). Advances in radiotherapy for head and neck cancer. *Oral Oncology*, 46(6), 439-441. *Exclude: Study design (narrative description of radiotherapies)*
- Biagioli, M. C., Harvey, M., Roman, E., Raez, L. E., Wolfson, A. H., Mutyala, S., . . . Markoe, A. (2007). Intensity-modulated radiotherapy with concurrent chemotherapy for previously irradiated, recurrent head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 69(4), 1067-1073. *Exclude: Date*
- Bignardi, M., Cozzi, L., Fogliata, A., Lattuada, P., Mancosu, P., Navarria, P., . . . Scorsetti, M. (2009). Critical appraisal of volumetric modulated arc therapy in stereotactic body radiation therapy for metastases to abdominal

- lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1570-1577. *Exclude: Study size*
- Bijl, H. P., van Luijk, P., Coppes, R. P., Schippers, J. M., Konings, A. W., & van der Kogel, A. J. (2003). Unexpected changes of rat cervical spinal cord tolerance caused by inhomogeneous dose distributions. *International Journal of Radiation Oncology, Biology, Physics*, 57(1), 274-281. *Exclude: Population (rats)*
- Bilsky, M. H., Yamada, Y., Yenice, K. M., Lovelock, M., Hunt, M., Gutin, P. H., & Leibel, S. A. (2004). Intensity-modulated stereotactic radiotherapy of paraspinal tumors: A preliminary report. *Neurosurgery*, 54(4), 823-830. *Exclude: Study size*
- Birnbaum, A., Dipetrillo, T., Rathore, R., Anderson, E., Wanebo, H., Puthwala, Y., . . . Sio, T. T. (2010). Cetuximab, paclitaxel, carboplatin, and radiation for head and neck cancer: A toxicity analysis. *American Journal of Clinical Oncology*, 33(2), 144-147. *Exclude: Study size (harms – serious adverse events not specific to IMRT)*
- Bist, S. S., Varshney, S., Kumar, R., Bhagat, S., & Gupta, N. (2010). Laryngeal keratosis with underlying invasive carcinoma. *Ear, Nose, & Throat Journal*, 89(12), 578-580. *Exclude: Study design (case report)*
- Blais, A. R., Lederer, E., Oliver, M., & Leszczynski, K. (2012). Static and rotational step-and-shoot IMRT treatment plans for the prostate: A risk comparison study. *Medical Physics*, 39(2), 1069-1078. *Exclude: Treatment planning*
- Blanco, A. I., Chao, K. S., El Naqa, I., Franklin, G. E., Zakarian, K., Vicic, M., & Deasy, J. O. (2005). Dose-volume modeling of salivary function in patients with head-and-neck cancer receiving radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 62(4), 1055-1069. *Exclude: Date*
- Blanpain, B., & Mercier, D. (2009). The delta envelope: A technique for dose distribution comparison. *Medical Physics*, 36(3), 797-808. *Exclude: Treatment planning*
- Boda-Heggemann, J., Kohler, F. M., Kupper, B., Wolff, D., Wertz, H., Mai, S., . . . Wenz, F. (2008). Accuracy of ultrasound-based (BAT) prostate-repositioning: A three-dimensional on-line fiducial-based assessment with cone-beam computed tomography. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1247-1255. *Exclude: Study size*
- Boda-Heggemann, J., Lohr, F., Wenz, F., Flentje, M., & Guckenberger, M. (2011). kV cone-beam CT-based IGRT: A clinical review. *Strahlentherapie Und Onkologie*, 187(5), 284-291. *Exclude: Treatment planning*
- Boda-Heggemann, J., Mennemeyer, P., Wertz, H., Riesenacker, N., Kupper, B., Lohr, F., & Wenz, F. (2009). Accuracy of ultrasound-based image guidance for daily positioning of the upper abdomen: An online comparison with cone beam CT. *International Journal of Radiation Oncology, Biology, Physics*, 74(3), 892-897. *Exclude: Study size*
- Boehling, N. S., Grosshans, D. R., Bluett, J. B., Palmer, M. T., Song, X., Amos, R. A., . . . Woo, S. Y. (2012). Dosimetric comparison of three-dimensional conformal proton radiotherapy, intensity-modulated proton therapy, and intensity-modulated radiotherapy for treatment of pediatric craniopharyngiomas. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), 643-652. *Exclude: Study size*
- Boehmer, D., Maingon, P., Poortmans, P., Baron, M. H., Miralbell, R., Remouchamps, V., . . . EORTC radiation oncology, g. (2006). Guidelines for primary radiotherapy of patients with prostate cancer. *Radiotherapy & Oncology*, 79(3), 259-269. *Exclude: Treatment planning*
- Bohrer, M., Schroder, P., Welzel, G., Wertz, H., Lohr, F., Wenz, F., & Mai, S. K. (2008). Reduced rectal toxicity with ultrasound-based image guided radiotherapy using BAT (B-mode acquisition and targeting system) for prostate cancer. *Strahlentherapie Und Onkologie*, 184(12), 674-678. *Exclude: Date*
- Bohsung, J., Gillis, S., Arrans, R., Bakai, A., De Wagter, C., Knoos, T., . . . Williams, P. (2005). IMRT treatment planning:- a comparative inter-system and inter-centre planning exercise of the ESTRO QUASIMODO group. *Radiotherapy & Oncology*, 76(3), 354-361. *Exclude: Treatment planning*

- Bokstein, F., Kovner, F., Blumenthal, D. T., Ram, Z., Templehoff, H., Kanner, A. A., & Corn, B. W. (2008). A common sense approach to radiotherapy planning of glioblastoma multiforme situated in the temporal lobe. *International Journal of Radiation Oncology, Biology, Physics*, 72(3), 900-904. *Exclude: Intervention not of interest (surgery and primary irradiation)*
- Bolsi, A., Fogliata, A., & Cozzi, L. (2003). Radiotherapy of small intracranial tumours with different advanced techniques using photon and proton beams: A treatment planning study. *Radiotherapy & Oncology*, 68(1), 1-14. *Exclude: Sample size*
- Bondiau, P. Y., Malandain, G., Chanalet, S., Marcy, P. Y., Foa, C., & Ayache, N. (2004). [Image processing and radiotherapy]. *Cancer Radiotherapie*, 8(2), 120-129. *Exclude: Study design (narrative review)*
- Borghero, Y. O., Salehpour, M., McNeese, M. D., Stovall, M., Smith, S. A., Johnson, J., . . . Buchholz, T. A. (2007). Multileaf field-in-field forward-planned intensity-modulated dose compensation for whole-breast irradiation is associated with reduced contralateral breast dose: A phantom model comparison. *Radiotherapy & Oncology*, 82(3), 324-328. *Exclude: Treatment planning*
- Boris, R. S., Bhandari, A., Krane, L. S., Eun, D., Kaul, S., & Peabody, J. O. (2009). Salvage robotic-assisted radical prostatectomy: Initial results and early report of outcomes. *BJU International*, 103(7), 952-956. *Exclude: Study size*
- Bortfeld, T. (2004). Very high energy electromagnetically-scanned electron beams are an attractive alternative to photon IMRT. against the proposition. *Medical Physics*, 31(7), 1946-1948. *Exclude: Study design (comment)*
- Bortfeld, T., Jokivarsi, K., Goitein, M., Kung, J., & Jiang, S. B. (2002). Effects of intra-fraction motion on IMRT dose delivery: Statistical analysis and simulation. *Physics in Medicine & Biology*, 47(13), 2203-2220. *Exclude: Treatment planning*
- Bos, L. J., Damen, E. M., de Boer, R. W., Mijnheer, B. J., McShan, D. L., Fraass, B. A., . . . Lebesque, J. V. (2002). Reduction of rectal dose by integration of the boost in the large-field treatment plan for prostate irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 52(1), 254-265. *Exclude: Date*
- Bossi, A., De Wever, I., Van Limbergen, E., & Vanstraelen, B. (2007). Intensity modulated radiation-therapy for preoperative posterior abdominal wall irradiation of retroperitoneal liposarcomas. *International Journal of Radiation Oncology, Biology, Physics*, 67(1), 164-170. *Exclude: Study size*
- Bossi, P., Orlandi, E., Bergamini, C., Locati, L. D., Granata, R., Mirabile, A., . . . Licitra, L. (2011). Docetaxel, cisplatin and 5-fluorouracil-based induction chemotherapy followed by intensity-modulated radiotherapy concurrent with cisplatin in locally advanced EBV-related nasopharyngeal cancer. *Annals of Oncology*, 22(11), 2495-2500. *Exclude: Study size*
- Both, S., Wang, K. K., Plastaras, J. P., Deville, C., Bar Ad, V., Tochner, Z., & Vapiwala, N. (2011). Real-time study of prostate intrafraction motion during external beam radiotherapy with daily endorectal balloon. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1302-1309. *Exclude: Treatment planning*
- Bottke, D., Wiegel, T., Kreienberg, R., Kurzeder, C., & Sauer, G. (2007). Stage IB endometrial cancer. does lymphadenectomy replace adjuvant radiotherapy? *Strahlentherapie Und Onkologie*, 183(11), 600-604. *Exclude: Study design (narrative review)*
- Bouchard, H., & Seuntjens, J. (2004). Ionization chamber-based reference dosimetry of intensity modulated radiation beams. *Medical Physics*, 31(9), 2454-2465. *Exclude: Treatment planning*
- Bouchard, M., Nadeau, S., Gingras, L., Raymond, P. E., Beaulieu, F., Beaulieu, L., . . . Germain, I. (2008). Clinical outcome of adjuvant treatment of endometrial cancer using aperture-based intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1343-1350. *Exclude: Study size*
- Bowyer, J. D., Sullivan, T. J., Whitehead, K. J., Kelly, L. E., & Allison, R. W. (2003). The management of perineural spread of squamous cell carcinoma to the ocular adnexae. *Ophthalmic Plastic & Reconstructive Surgery*, 19(4), 275-281. *Exclude: Sample size*

- Boylan, C. J., Golby, C., & Rowbottom, C. G. (2010). A VMAT planning solution for prostate patients using a commercial treatment planning system. *Physics in Medicine & Biology*, 55(14), N395-404. *Exclude: Treatment planning*
- Braaksma, M., & Levendag, P. (2002). Tools for optimal tissue sparing in concomitant chemoradiation of advanced head and neck cancer: Subcutaneous amifostine and computed tomography-based target delineation. *Seminars in Oncology*, 29(6 Suppl 19), 63-70. *Exclude: Date*
- Braaksma, M. M., Wijers, O. B., van Sornsens de Koste, J. R., van der Est, H., Schmitz, P. I., Nowak, P. J., & Levendag, P. C. (2003). Optimisation of conformal radiation therapy by intensity modulation: Cancer of the larynx and salivary gland function. *Radiotherapy & Oncology*, 66(3), 291-302. *Exclude: Date*
- Braam, P. M., Terhaard, C. H., Roesink, J. M., & Raaijmakers, C. P. (2006). Intensity-modulated radiotherapy significantly reduces xerostomia compared with conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 975-980. *Exclude: Date*
- Brabbins, D., Martinez, A., Yan, D., Lockman, D., Wallace, M., Gustafson, G., . . . Wong, J. (2005). A dose-escalation trial with the adaptive radiotherapy process as a delivery system in localized prostate cancer: Analysis of chronic toxicity. *International Journal of Radiation Oncology, Biology, Physics*, 61(2), 400-408. *Exclude: Date*
- Bragg, C. M., Conway, J., & Robinson, M. H. (2002). The role of intensity-modulated radiotherapy in the treatment of parotid tumors. *International Journal of Radiation Oncology, Biology, Physics*, 52(3), 729-738. *Exclude: Sample size*
- Bral, S., De Ridder, M., Duchateau, M., Gevaert, T., Engels, B., Schallier, D., & Storme, G. (2011). Daily megavoltage computed tomography in lung cancer radiotherapy: Correlation between volumetric changes and local outcome. *International Journal of Radiation Oncology, Biology, Physics*, 80(5), 1338-1342. *Exclude: Treatment planning*
- Bratengeier, K. (2005). 2-step IMAT and 2-step IMRT in three dimensions. *Medical Physics*, 32(12), 3849-3861. *Exclude: Treatment planning*
- Bratengeier, K. (2005). 2-step IMAT and 2-step IMRT: A geometrical approach. *Medical Physics*, 32(3), 777-785. *Exclude: Treatment planning*
- Bratengeier, K., Guckenberger, M., Meyer, J., Muller, G., Pfreundner, L., Schwab, F., & Flentje, M. (2007). A comparison between 2-step IMRT and conventional IMRT planning. *Radiotherapy & Oncology*, 84(3), 298-306. *Exclude: Treatment planning*
- Bratengeier, K., Oechsner, M., & Gainey, M. (2012). Methods for monitor-unit-preserving adaptation of intensity modulated arc therapy techniques to the daily target-A simple comparison. *Medical Physics*, 39(2), 713-720. *Exclude: Treatment planning*
- Bratengeier, K., Oechsner, M., Gainey, M., & Flentje, M. (2009). Remarks on reporting and recording consistent with the ICRU reference dose. *Radiation Oncology*, 4, 44. *Exclude: Treatment planning*
- Bratengeier, K., Polat, B., Gainey, M., Grewenig, P., Meyer, J., & Flentje, M. (2009). Is ad-hoc plan adaptation based on 2-step IMRT feasible?. *Radiotherapy & Oncology*, 93(2), 266-272. *Exclude: Study size*
- Breen, S. L., Craig, T., Bayley, A., O'Sullivan, B., Kim, J., & Jaffray, D. (2006). Spinal cord planning risk volumes for intensity-modulated radiation therapy of head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 64(1), 321-325. *Exclude: Study size*
- Breen, S. L., Kehagioglou, P., Usher, C., & Plowman, P. N. (2004). A comparison of conventional, conformal and intensity-modulated coplanar radiotherapy plans for posterior fossa treatment. *British Journal of Radiology*, 77(921), 768-774. *Exclude: Study size*
- Brower, V. (2009). Clinical trial conundrums: More art than science?. *Journal of the National Cancer Institute*, 101(2), 77-79. *Exclude: Study design (news)*



- Bubenzer, V., Esfandi, M., Jafari, N., Manske, M. A., & Wong, P. F. (2004). Dosage along the matchline between upper head-and-neck IMRT fields and conventional supraclavicular fields. *Medical Dosimetry*, 29(2), 104-108. *Exclude: Treatment planning*
- Budach, W., Bolke, E., Fietkau, R., Buchali, A., Wendt, T. G., Popp, W., . . . Sack, H. (2011). Evaluation of time, attendance of medical staff, and resources during radiotherapy for head and neck cancer patients: The DEGRO-QUIRO trial. *Strahlentherapie Und Onkologie*, 187(8), 449-460. *Exclude: Treatment planning*
- Buettner, F., Gulliford, S. L., Webb, S., & Partridge, M. (2010). Using bayesian logistic regression to evaluate a new type of dosimetric constraint for prostate radiotherapy treatment planning. *Medical Physics*, 37(4), 1768-1777. *Exclude: Treatment planning*
- Buonamici, F. B., Compagnucci, A., Marrazzo, L., Russo, S., & Bucciolini, M. (2007). An intercomparison between film dosimetry and diode matrix for IMRT quality assurance. *Medical Physics*, 34(4), 1372-1379. *Exclude: Treatment planning*
- Bussels, B., Maes, A., Hermans, R., Nuyts, S., Weltens, C., & Van den Bogaert, W. (2004). Recurrences after conformal parotid-sparing radiotherapy for head and neck cancer. *Radiotherapy & Oncology*, 72(2), 119-127. *Exclude: Date*
- Butler, E. B., Shukla, V., Paulino, A. C., Lu, H. H., Butler, R., Smiedala, M., . . . Teh, B. S. (2007). Computer visualization techniques (CVTs) foster evidence-based target delineation. *Cancer Investigation*, 25(1), 1-5. *Exclude: Treatment planning*
- Cadman, P., Bassalow, R., Sidhu, N. P., Ibbott, G., & Nelson, A. (2002). Dosimetric considerations for validation of a sequential IMRT process with a commercial treatment planning system. *Physics in Medicine & Biology*, 47(16), 3001-3010. *Exclude: Treatment planning*
- Cahlon, O., Zelefsky, M. J., Shippy, A., Chan, H., Fuks, Z., Yamada, Y., . . . Amols, H. (2008). Ultra-high dose (86.4 Gy) IMRT for localized prostate cancer: Toxicity and biochemical outcomes. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 330-337. *Exclude: Date*
- Cai, J., Yue, J., McLawhorn, R., Yang, W., Wijesooriya, K., Dunlap, N. E., . . . Benedict, S. H. (2011). Dosimetric comparison of 6 MV and 15 MV single arc rapidarc to helical TomoTherapy for the treatment of pancreatic cancer. *Medical Dosimetry*, 36(3), 317-320. *Exclude: Study size*
- Cao, D., Holmes, T. W., Afghan, M. K., & Shepard, D. M. (2007). Comparison of plan quality provided by intensity-modulated arc therapy and helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 69(1), 240-250. *Exclude: Study size*
- Capote, R., Sanchez-Doblado, F., Leal, A., Lagares, J. I., Arrans, R., & Hartmann, G. H. (2004). An EGSnrc monte carlo study of the microionization chamber for reference dosimetry of narrow irregular IMRT beamlets. *Medical Physics*, 31(9), 2416-2422. *Exclude: Treatment planning*
- Carlsson, F., & Forsgren, A. (2006). Iterative regularization in intensity-modulated radiation therapy optimization. *Medical Physics*, 33(1), 225-234. *Exclude: Treatment planning*
- Carvalho, P. A., Jaguar, G. C., Pellizzon, A. C., Prado, J. D., Lopes, R. N., & Alves, F. A. (2011). Evaluation of low-level laser therapy in the prevention and treatment of radiation-induced mucositis: A double-blind randomized study in head and neck cancer patients. *Oral Oncology*, 47(12), 1176-1181. *Exclude: Intervention not of interest (low level laser therapy)*
- Casamassima, F., Masi, L., Menichelli, C., Bonucci, I., Casamassima, E., Lazzeri, M., . . . Aterini, S. (2011). Efficacy of eradicated radiotherapy for limited nodal metastases detected with choline PET scan in prostate cancer patients. *Tumori*, 97(1), 49-55. *Exclude: Intervention not of interest (SBRT)*
- Casas, F., Borrás, J. M., Ferrer, F., Guanyabens, N., Gutierrez del Pozo, R., Leon, C., . . . Zapatero, A. (2010). Evidence-based consensus recommendations to improve the quality of life in prostate cancer treatment. *Clinical & Translational Oncology: Official Publication of the Federation of Spanish Oncology Societies & of the National Cancer Institute of Mexico*, 12(5), 346-355. *Exclude: Study design (narrative review of harms)*

- Cash, J. C. (2006). Changing paradigms: Intensity modulated radiation therapy. *Seminars in Oncology Nursing*, 22(4), 242-248. *Exclude: Study design (narrative review)*
- Caudell, J. J., Burnett, O. L., 3rd, Schaner, P. E., Bonner, J. A., & Duan, J. (2010). Comparison of methods to reduce dose to swallowing-related structures in head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 462-467. *Exclude: Study size*
- Caudell, J. J., De Los Santos, J. F., Keene, K. S., Fiveash, J. B., Wang, W., Carlisle, J. D., & Popple, R. (2007). A dosimetric comparison of electronic compensation, conventional intensity modulated radiotherapy, and tomotherapy in patients with early-stage carcinoma of the left breast. *International Journal of Radiation Oncology, Biology, Physics*, 68(5), 1505-1511. *Exclude: Study size*
- Caudell, J. J., Locher, J. L., & Bonner, J. A. (2011). Diagnosis-to-treatment interval and control of locoregionally advanced head and neck cancer. *Archives of Otolaryngology -- Head & Neck Surgery*, 137(3), 282-285. *Exclude: Treatment planning*
- Caudell, J. J., Meredith, R. F., Spencer, S. A., Keene, K. S., Dobelbower, M. C., & Bonner, J. A. (2010). Margin on gross tumor volume and risk of local recurrence in head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 164-168. : *Outcome not of interest (gross tumor volume)*
- Caudell, J. J., Schaner, P. E., Desmond, R. A., Meredith, R. F., Spencer, S. A., & Bonner, J. A. (2010). Dosimetric factors associated with long-term dysphagia after definitive radiotherapy for squamous cell carcinoma of the head and neck. *International Journal of Radiation Oncology, Biology, Physics*, 76(2), 403-409. *Exclude: Treatment planning*
- Caudrelier, J. M., Morgan, S. C., Montgomery, L., Lacelle, M., Nyiri, B., & Macpherson, M. (2009). Helical tomotherapy for locoregional irradiation including the internal mammary chain in left-sided breast cancer: Dosimetric evaluation. *Radiotherapy & Oncology*, 90(1), 99-105. *Exclude: Study size*
- Cavalieri, R., Gay, H. A., Liu, J., Ferreira, M. C., Mota, H. C., Sibata, C. H., & Allison, R. R. (2011). Total error shift patterns for daily CT on rails image-guided radiotherapy to the prostate bed. *Radiation Oncology*, 6, 142. *Exclude: Study size*
- Cavey, M. L., Bayouth, J. E., Endres, E. J., Pena, J. M., Colman, M., & Hatch, S. (2005). Dosimetric comparison of conventional and forward-planned intensity-modulated techniques for comprehensive locoregional irradiation of post-mastectomy left breast cancers. *Medical Dosimetry*, 30(2), 107-116. *Exclude: Study size*
- Cella, L., Liuzzi, R., Magliulo, M., Conson, M., Camera, L., Salvatore, M., & Pacelli, R. (2010). Radiotherapy of large target volumes in hodgkin's lymphoma: Normal tissue sparing capability of forward IMRT versus conventional techniques. *Radiation Oncology*, 5, 33. *Exclude: Study size*
- Cendales, R., Schiappacasse, L., Schnitman, F., Garcia, G., & Marsiglia, H. (2011). Helical tomotherapy in patients with breast cancer and complex treatment volumes. *Clinical & Translational Oncology: Official Publication of the Federation of Spanish Oncology Societies & of the National Cancer Institute of Mexico*, 13(4), 268-274. *Exclude: Study size*
- Ceulemans, G., Voordeckers, M., Farrag, A., Verdries, D., Storme, G., & Everaert, H. (2011). Can 18-FDG-PET during radiotherapy replace post-therapy scanning for detection/demonstration of tumor response in head-and-neck cancer?. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), 938-942. *Exclude: Intervention not of interest (PET scan)*
- Chakraborty, S., Ghoshal, S., Patil, V. M., Oinam, A. S., & Sharma, S. C. (2011). Conformal radiotherapy in the treatment of advanced juvenile nasopharyngeal angiofibroma with intracranial extension: An institutional experience. *International Journal of Radiation Oncology, Biology, Physics*, 80(5), 1398-1404. *Exclude: Study size*

- Chan, M. F., Chui, C. S., Song, Y., Burman, C., Yorke, E., Della-Biancia, C., . . . Schupak, K. (2006). A novel radiation therapy technique for malignant pleural mesothelioma combining electrons with intensity-modulated photons. *Radiotherapy & Oncology*, *79*(2), 218-223. *Exclude: Study size*
- Chan, M. F., Schupak, K., Burman, C., Chui, C. S., & Ling, C. C. (2003). Comparison of intensity-modulated radiotherapy with three-dimensional conformal radiation therapy planning for glioblastoma multiforme. *Medical Dosimetry*, *28*(4), 261-265. *Exclude: Study size*
- Chan, P., Yeo, I., Perkins, G., Fyles, A., & Milosevic, M. (2006). Dosimetric comparison of intensity-modulated, conformal, and four-field pelvic radiotherapy boost plans for gynecologic cancer: A retrospective planning study. *Radiation Oncology*, *1*, 13. *Exclude: Study size*
- Chan, S. H., Ng, W. T., Kam, K. L., Lee, M. C., Choi, C. W., Yau, T. K., . . . Chow, S. K. (2009). Sensorineural hearing loss after treatment of nasopharyngeal carcinoma: A longitudinal analysis. *International Journal of Radiation Oncology, Biology, Physics*, *73*(5), 1335-1342. *Exclude: Date*
- Chandraraj, V., Stathakis, S., Manickam, R., Esquivel, C., Supe, S. S., & Papanikolaou, N. (2011). Comparison of four commercial devices for RapidArc and sliding window IMRT QA. *Journal of Applied Clinical Medical Physics*, *12*(2), 3367. *Exclude: Treatment planning*
- Chang, A. J., Richardson, S., Grigsby, P. W., & Schwarz, J. K. (2012). Split-field helical tomotherapy with or without chemotherapy for definitive treatment of cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, *82*(1), 263-269. *Exclude: Study size*
- Chang, C. Y., Cheng, S. L., & Chang, S. C. (2011). Adenoid cystic carcinoma of trachea treated with tumor curettage and adjuvant intensity modulated radiation therapy. *Southern Medical Journal*, *104*(1), 68-70. *Exclude: Study size*
- Chang, D. T., Amdur, R. J., Pacholke, H., Mendenhall, N. P., Morris, C. G., Byer, G. A., & Olivier, K. R. (2009). Xerostomia in long-term survivors of aggressive non-hodgkin's lymphoma of waldeyer's ring: A potential role for parotid-sparing techniques?. *American Journal of Clinical Oncology*, *32*(2), 145-149. *Exclude: Study size*
- Chang, J., Kowalski, A., Hou, B., & Narayana, A. (2008). Feasibility study of intensity-modulated radiotherapy (IMRT) treatment planning using brain functional MRI. *Medical Dosimetry*, *33*(1), 42-47. *Exclude: Study size*
- Chang, J., Obcemea, C. H., Sillanpaa, J., Mechalakos, J., & Burman, C. (2004). Use of EPID for leaf position accuracy QA of dynamic multi-leaf collimator (DMLC) treatment. *Medical Physics*, *31*(7), 2091-2096. *Exclude: Treatment planning*
- Chang, J., Thakur, S., Perera, G., Kowalski, A., Huang, W., Karimi, S., . . . Narayana, A. (2006). Image-fusion of MR spectroscopic images for treatment planning of gliomas. *Medical Physics*, *33*(1), 32-40. *Exclude: Study size*
- Chang, J. Y., Zhang, X., Wang, X., Kang, Y., Riley, B., Bilton, S., . . . Cox, J. D. (2006). Significant reduction of normal tissue dose by proton radiotherapy compared with three-dimensional conformal or intensity-modulated radiation therapy in stage I or stage III non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, *65*(4), 1087-1096. *Exclude: Treatment planning*
- Chang, S. X., Cullip, T. J., Deschesne, K. M., Miller, E. P., & Rosenman, J. G. (2004). Compensators: An alternative IMRT delivery technique. *Journal of Applied Clinical Medical Physics*, *5*(3), 15-36. *Exclude: Treatment planning*
- Chanyavanich, V., Das, S. K., Lee, W. R., & Lo, J. Y. (2011). Knowledge-based IMRT treatment planning for prostate cancer. *Medical Physics*, *38*(5), 2515-2522. *Exclude: Treatment planning*
- Chao, K. S., Ozyigit, G., Blanco, A. I., Thorstad, W. L., Deasy, J. O., Haughey, B. H., . . . Sessions, D. G. (2004). Intensity-modulated radiation therapy for oropharyngeal carcinoma: Impact of tumor volume. *International Journal of Radiation Oncology, Biology, Physics*, *59*(1), 43-50. *Exclude: Date*
- Chao, K. S., Wippold, F. J., Ozyigit, G., Tran, B. N., & Dempsey, J. F. (2002). Determination and delineation of nodal target volumes for head-and-neck cancer based on patterns of failure in patients receiving definitive and

- postoperative IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 53(5), 1174-1184. Exclude: Date
- Chapet, O., Fraass, B. A., & Ten Haken, R. K. (2006). Multiple fields may offer better esophagus sparing without increased probability of lung toxicity in optimized IMRT of lung tumors. *International Journal of Radiation Oncology, Biology, Physics*, 65(1), 255-265. Exclude: Study size
- Chatterjee, S., Willis, N., Locks, S. M., Mott, J. H., & Kelly, C. G. (2011). Dosimetric and radiobiological comparison of helical tomotherapy, forward-planned intensity-modulated radiotherapy and two-phase conformal plans for radical radiotherapy treatment of head and neck squamous cell carcinomas. *British Journal of Radiology*, 84(1008), 1083-1090. Exclude: Study size
- Chau, M. C., Leung, S. F., Kam, K. M., Cheung, K. Y., Kwan, W. H., Yu, K. H., . . . Chan, T. C. (2007). Feasibility of using interpolated contours of targets and organs at risk in intensity-modulated radiation therapy treatment planning for advanced-stage nasopharyngeal carcinoma. *Australasian Radiology*, 51(5), 480-484. Exclude: Treatment planning
- Chau, R. M., Teo, P. M., Kam, M. K., Leung, S. F., Cheung, K. Y., & Chan, A. T. (2007). Dosimetric comparison between 2-dimensional radiation therapy and intensity modulated radiation therapy in treatment of advanced T-stage nasopharyngeal carcinoma: To treat less or more in the planning organ-at-risk volume of the brainstem and spinal cord. *Medical Dosimetry*, 32(4), 263-270. Exclude: Treatment planning
- Chauvet, I., Petitfils, A., Lehobey, C., Kristner, J. Y., Brunet, Y., Lembrez, R., . . . Rosenwald, J. C. (2005). The sliding slit test for dynamic IMRT: A useful tool for adjustment of MLC related parameters. *Physics in Medicine & Biology*, 50(4), 563-580. Exclude: Treatment planning
- Chen, A. M., Daly, M. E., Bucci, M. K., Xia, P., Akazawa, C., Quivey, J. M., . . . Phillips, T. L. (2007). Carcinomas of the paranasal sinuses and nasal cavity treated with radiotherapy at a single institution over five decades: Are we making improvement?. *International Journal of Radiation Oncology, Biology, Physics*, 69(1), 141-147. Exclude: Date
- Chen, A. M., Farwell, D. G., Lau, D. H., Li, B. Q., Luu, Q., & Donald, P. J. (2011). Radiation therapy in the management of head-and-neck cancer of unknown primary origin: How does the addition of concurrent chemotherapy affect the therapeutic ratio?. *International Journal of Radiation Oncology, Biology, Physics*, 81(2), 346-352. Exclude: Outcomes not specific to IMRT
- Chen, A. M., Farwell, D. G., Luu, Q., Cheng, S., Donald, P. J., & Purdy, J. A. (2011). Prospective trial of high-dose reirradiation using daily image guidance with intensity-modulated radiotherapy for recurrent and second primary head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(3), 669-676. Exclude: Study size
- Chen, A. M., Farwell, D. G., Luu, Q., Donald, P. J., Perks, J., & Purdy, J. A. (2011). Evaluation of the planning target volume in the treatment of head and neck cancer with intensity-modulated radiotherapy: What is the appropriate expansion margin in the setting of daily image guidance?. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), 943-949. Exclude: Treatment planning
- Chen, A. M., Lee, N. Y., Yang, C. C., Liu, T., Narayan, S., Vijayakumar, S., & Purdy, J. A. (2010). Comparison of intensity-modulated radiotherapy using helical tomotherapy and segmental multileaf collimator-based techniques for nasopharyngeal carcinoma: Dosimetric analysis incorporating quality assurance guidelines from RTOG 0225. *Technology in Cancer Research & Treatment*, 9(3), 291-298. Exclude: Treatment planning
- Chen, A. M., Li, B. Q., Farwell, D. G., Marsano, J., Vijayakumar, S., & Purdy, J. A. (2011). Improved dosimetric and clinical outcomes with intensity-modulated radiotherapy for head-and-neck cancer of unknown primary origin. *International Journal of Radiation Oncology, Biology, Physics*, 79(3), 756-762. Exclude: Included in De Neve (2012)

- Chen, A. M., Li, B. Q., Lau, D. H., Farwell, D. G., Luu, Q., Stuart, K., . . . Vijayakumar, S. (2010). Evaluating the role of prophylactic gastrostomy tube placement prior to definitive chemoradiotherapy for head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 78(4), 1026-1032. *Exclude: Intervention not of interest (prophylactic gastrostomy tube placement)*
- Chen, A. M., Marsano, J., Perks, J., Farwell, G., Luu, Q., Donald, P. J., et al. (2011). Comparison of IMRT techniques in the radiotherapeutic management of head and neck cancer: Is tomotherapy "better" than step-and-shoot IMRT? *Technology in Cancer Research & Treatment*, 10(2), 171-177. *Exclude: Treatment planning*
- Chen, A. M., Sreeraman, R., Mathai, M., Vijayakumar, S., & Purdy, J. A. (2010). Potential of helical tomotherapy to reduce dose to the ocular structures for patients treated for unresectable sinonasal cancer. *American Journal of Clinical Oncology*, 33(6), 595-598. *Exclude: Study size*
- Chen, A. M., Vaughan, A., Narayan, S., & Vijayakumar, S. (2008). Palliative radiation therapy for head and neck cancer: Toward an optimal fractionation scheme. *Head & Neck*, 30(12), 1586-1591. *Exclude: Treatment planning*
- Chen, C., Damek, D., Gaspar, L. E., Waziri, A., Lillehei, K., Kleinschmidt-DeMasters, B. K., . . . Kavanagh, B. D. (2011). Phase I trial of hypofractionated intensity-modulated radiotherapy with temozolomide chemotherapy for patients with newly diagnosed glioblastoma multiforme. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), 1066-1074. *Exclude: Study size*
- Chen, H., Lohr, F., Fritz, P., Wenz, F., Dobler, B., Lorenz, F., & Muhlnickel, W. (2010). Stereotactic, single-dose irradiation of lung tumors: A comparison of absolute dose and dose distribution between pencil beam and monte carlo algorithms based on actual patient CT scans. *International Journal of Radiation Oncology, Biology, Physics*, 78(3), 955-963. *Exclude: Intervention not of interest (SBRT)*
- Chen, J., Chuang, C. F., Morin, O., Aubin, M., & Pouliot, J. (2006). Calibration of an amorphous-silicon flat panel portal imager for exit-beam dosimetry. *Medical Physics*, 33(3), 584-594. *Exclude: Treatment planning*
- Chen, J., Shrieve, D. C., & Hitchcock, Y. J. (2008). Comparison of cervical esophagus dose-volumes for three radiotherapy techniques for head and neck cancer. *Radiotherapy & Oncology*, 87(2), 274-280. *Exclude: Study date*
- Chen, L., Nguyen, T. B., Jones, E., Chen, Z., Luo, W., Wang, L., . . . Ma, C. M. (2007). Magnetic resonance-based treatment planning for prostate intensity-modulated radiotherapy: Creation of digitally reconstructed radiographs. *International Journal of Radiation Oncology, Biology, Physics*, 68(3), 903-911. *Exclude: Date*
- Chen, L., Paskalev, K., Xu, X., Zhu, J., Wang, L., Price, R. A., . . . Ma, C. M. (2010). Rectal dose variation during the course of image-guided radiation therapy of prostate cancer. *Radiotherapy & Oncology*, 95(2), 198-202. *Exclude: Treatment planning*
- Chen, M. J., Santos Ada, S., Sakuraba, R. K., Lopes, C. P., Goncalves, V. D., Weltman, E., . . . Cruz, J. C. (2010). Intensity-modulated and 3D-conformal radiotherapy for whole-ventricular irradiation as compared with conventional whole-brain irradiation in the management of localized central nervous system germ cell tumors. *International Journal of Radiation Oncology, Biology, Physics*, 76(2), 608-614. *Exclude: Study size*
- Chen, S. W., Yang, S. N., Liang, J. A., Shiau, A. C., & Lin, F. J. (2005). Comparative dosimetric study of two strategies of intensity-modulated radiotherapy in nasopharyngeal cancer. *Medical Dosimetry*, 30(4), 219-227. *Exclude: Study size*
- Chen, W. C., Hwang, T. Z., Wang, W. H., Lu, C. H., Chen, C. C., Chen, C. M., . . . Chen, M. F. (2009). Comparison between conventional and intensity-modulated post-operative radiotherapy for stage III and IV oral cavity cancer in terms of treatment results and toxicity. *Oral Oncology*, 45(6), 505-510. *Exclude: Date*
- Chen, W. C., Jackson, A., Budnick, A. S., Pfister, D. G., Kraus, D. H., Hunt, M. A., . . . Wolden, S. L. (2006). Sensorineural hearing loss in combined modality treatment of nasopharyngeal carcinoma. *Cancer*, 106(4), 820-829. *Exclude: Date*

- Chen, Y. J., Kuo, J. V., Ramsinghani, N. S., & Al-Ghazi, M. S. (2002). Intensity-modulated radiotherapy for previously irradiated, recurrent head-and-neck cancer. *Medical Dosimetry*, 27(2), 171-176. *Exclude: Sample size*
- Chen, Y. J., Liu, A., Tsai, P. T., Vora, N. L., Pezner, R. D., Schultheiss, T. E., & Wong, J. Y. (2005). Organ sparing by conformal avoidance intensity-modulated radiation therapy for anal cancer: Dosimetric evaluation of coverage of pelvis and inguinal/femoral nodes. *International Journal of Radiation Oncology, Biology, Physics*, 63(1), 274-281. *Exclude: Study size*
- Chen, Z., Xing, L., & Nath, R. (2002). Independent monitor unit calculation for intensity modulated radiotherapy using the MIMiC multileaf collimator. *Medical Physics*, 29(9), 2041-2051. *Exclude: Treatment planning*
- Cheng, C. W., Cho, S. H., Taylor, M., & Das, I. J. (2007). Determination of zero-field size percent depth doses and tissue maximum ratios for stereotactic radiosurgery and IMRT dosimetry: Comparison between experimental measurements and monte carlo simulation. *Medical Physics*, 34(8), 3149-3157. *Exclude: Treatment planning*
- Cheng, C. W., & Das, I. J. (2002). Comparison of beam characteristics in intensity modulated radiation therapy (IMRT) and those under normal treatment condition. *Medical Physics*, 29(2), 226-230. *Exclude: Treatment planning*
- Cheng, C. W., Das, I. J., & Huq, M. S. (2003). Lateral loss and dose discrepancies of multileaf collimator segments in intensity modulated radiation therapy. *Medical Physics*, 30(11), 2959-2968. *Exclude: Treatment planning*
- Cheng, J. C., Wu, J. K., Huang, C. M., Liu, H. S., Huang, D. Y., Tsai, S. Y., . . . Huang, A. T. (2003). Dosimetric analysis and comparison of three-dimensional conformal radiotherapy and intensity-modulated radiation therapy for patients with hepatocellular carcinoma and radiation-induced liver disease. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 229-234. *Exclude: Sample size*
- Cheng, S. C., Ying, M. T., Kwong, D. L., & Wu, V. W. (2011). Sonographic appearance of parotid glands in patients treated with intensity-modulated radiotherapy or conventional radiotherapy for nasopharyngeal carcinoma. *Ultrasound in Medicine & Biology*, 37(2), 220-230. *Exclude: Outcomes not of interest (sonographic appearances of parotid glands)*
- Chera, B. S., Amdur, R. J., Morris, C. G., & Mendenhall, W. M. (2010). Carotid-sparing intensity-modulated radiotherapy for early-stage squamous cell carcinoma of the true vocal cord. *International Journal of Radiation Oncology, Biology, Physics*, 77(5), 1380-1385. *Exclude: Study size*
- Chera, B. S., Rodriguez, C., Morris, C. G., Louis, D., Yeung, D., Li, Z., & Mendenhall, N. P. (2009). Dosimetric comparison of three different involved nodal irradiation techniques for stage II hodgkin's lymphoma patients: Conventional radiotherapy, intensity-modulated radiotherapy, and three-dimensional proton radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(4), 1173-1180. *Exclude: Study size*
- Chi, A., Liao, Z., Nguyen, N. P., Howe, C., Gomez, D., Jang, S. Y., & Komaki, R. (2011). Intensity-modulated radiotherapy after extrapleural pneumonectomy in the combined-modality treatment of malignant pleural mesothelioma. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 6(6), 1132-1141. : *Study design (narrative review)*
- Childress, N. L., & Rosen, I. I. (2003). The design and testing of novel clinical parameters for dose comparison. *International Journal of Radiation Oncology, Biology, Physics*, 56(5), 1464-1479. *Exclude: Treatment planning*
- Childress, N. L., Salehpour, M., Dong, L., Bloch, C., White, R. A., & Rosen, I. I. (2005). Dosimetric accuracy of kodak EDR2 film for IMRT verifications. *Medical Physics*, 32(2), 539-548. *Exclude: Treatment planning*
- Childress, N. L., White, R. A., Bloch, C., Salehpour, M., Dong, L., & Rosen, I. I. (2005). Retrospective analysis of 2D patient-specific IMRT verifications. *Medical Physics*, 32(4), 838-850. *Exclude: Treatment planning*
- Cho, B. C., & Craig, T. (2006). More optimal dose distributions for moving lung tumours: A planning study. *Radiotherapy & Oncology*, 79(1), 122-130. *Exclude: Treatment planning*

- Cho, B. C., Hurkmans, C. W., Damen, E. M., Zijp, L. J., & Mijnheer, B. J. (2002). Intensity modulated versus non-intensity modulated radiotherapy in the treatment of the left breast and upper internal mammary lymph node chain: A comparative planning study. *Radiotherapy & Oncology*, 62(2), 127-136. *Exclude: Sample size*
- Choe, K. S., Jani, A. B., & Liauw, S. L. (2010). External beam radiotherapy for prostate cancer patients on anticoagulation therapy: How significant is the bleeding toxicity?. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 755-760. *Exclude: Outcomes not specific to IMRT*
- Choi, M., Fuller, C. D., Wang, S. J., Siddiqi, A., Wong, A., Thomas, C. R., Jr, & Fuss, M. (2009). Effect of body mass index on shifts in ultrasound-based image-guided intensity-modulated radiation therapy for abdominal malignancies. *Radiotherapy & Oncology*, 91(1), 114-119. *Exclude: Treatment planning*
- Choi, Y., Kim, J. K., Lee, H. S., Hur, W. J., Chai, G. Y., & Kang, K. M. (2005). Impact of intensity-modulated radiation therapy as a boost treatment on the lung-dose distributions for non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 63(3), 683-689. *Exclude: Study size*
- Chopra, S., Kamdar, D., Ugur, O. E., Chen, G., Peshek, B., Marunick, M., . . . Jacobs, J. (2011). Factors predictive of severity of osteoradionecrosis of the mandible. *Head & Neck*, 33(11), 1600-1605. *Exclude: Outcomes not of interest (risk factors predictive of severe mandibular osteoradionecrosis)*
- Chou, W. W., Puri, D. R., & Lee, N. Y. (2005). Intensity-modulated radiation therapy for head and neck cancer. *Expert Review of Anticancer Therapy*, 5(3), 515-521. *Exclude: Date*
- Christensen, E., Pintilie, M., Evans, K. R., Lenarduzzi, M., Menard, C., Catton, C. N., . . . Bristow, R. G. (2009). Longitudinal cytokine expression during IMRT for prostate cancer and acute treatment toxicity. *Clinical Cancer Research*, 15(17), 5576-5583. *Exclude: Outcome not of interest (inflammatory cytokine proteins)*
- Christian, J. A., Bedford, J. L., Webb, S., & Brada, M. (2007). Comparison of inverse-planned three-dimensional conformal radiotherapy and intensity-modulated radiotherapy for non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 735-741. *Exclude: Study size*
- Chung, H., Jin, H., Dempsey, J. F., Liu, C., Palta, J., Suh, T. S., & Kim, S. (2005). Evaluation of surface and build-up region dose for intensity-modulated radiation therapy in head and neck cancer. *Medical Physics*, 32(8), 2682-2689. *Exclude: Study size*
- Chung, H. T., Lee, B., Park, E., Lu, J. J., & Xia, P. (2008). Can all centers plan intensity-modulated radiotherapy (IMRT) effectively? an external audit of dosimetric comparisons between three-dimensional conformal radiotherapy and IMRT for adjuvant chemoradiation for gastric cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1167-1174. *Exclude: Study size*
- Chung, H. T., Xia, P., Chan, L. W., Park-Somers, E., & Roach, M., 3rd. (2009). Does image-guided radiotherapy improve toxicity profile in whole pelvic-treated high-risk prostate cancer? comparison between IG-IMRT and IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 73(1), 53-60. *: Date*
- Chung, J. B., Kim, J. S., Ha, S. W., & Ye, S. J. (2011). Statistical analysis of IMRT dosimetry quality assurance measurements for local delivery guideline. *Radiation Oncology*, 6, 27. *Exclude: Treatment planning*
- Chung, J. B., Lee, J. W., Kim, J. S., Kim, I. A., Lee, D. H., Kim, Y. L., . . . Suh, T. S. (2011). Comparison of target coverage and dose to organs at risk between simultaneous integrated-boost whole-field intensity-modulated radiation therapy and junctioned intensity-modulated radiation therapy with a conventional radiotherapy field in treatment of nasopharyngeal carcinoma. *Radiological Physics & Technology*, 4(2), 180-184. *Exclude: Study size*
- Chvetsov, A. V., Calveti, D., Sohn, J. W., & Kinsella, T. J. (2005). Regularization of inverse planning for intensity-modulated radiotherapy. *Medical Physics*, 32(2), 501-514. *Exclude: Treatment planning*
- Cilla, S., Macchia, G., Digesu, C., Deodato, F., Romanella, M., Ferrandina, G., . . . Morganti, A. G. (2010). 3D-conformal versus intensity-modulated postoperative radiotherapy of vaginal vault: A dosimetric comparison. *Medical Dosimetry*, 35(2), 135-142. *Exclude: Study size*

- Cilla, S., Viola, P., Azario, L., Grimaldi, L., Craus, M., D'Onofrio, G., . . . Piermattei, A. (2006). Comparison of measured and computed portal dose for IMRT treatment. *Journal of Applied Clinical Medical Physics*, 7(3), 65-79. *Exclude: Treatment planning*
- Clark, B. G., Candish, C., Vollans, E., Gete, E., Lee, R., Martin, M., . . . McKenzie, M. (2008). Optimization of stereotactic radiotherapy treatment delivery technique for base-of-skull meningiomas. *Medical Dosimetry*, 33(3), 239-247. *Exclude: Treatment planning*
- Clark, C. H., Bidmead, A. M., Mubata, C. D., Harrington, K. J., & Nutting, C. M. (2004). Intensity-modulated radiotherapy improves target coverage, spinal cord sparing and allows dose escalation in patients with locally advanced cancer of the larynx. *Radiotherapy & Oncology*, 70(2), 189-198. *Exclude: Study size*
- Clark, C. H., Hansen, V. N., Chantler, H., Edwards, C., James, H. V., Webster, G., . . . PARSPORT Trial Management, G. (2009). Dosimetry audit for a multi-centre IMRT head and neck trial. *Radiotherapy & Oncology*, 93(1), 102-108. *Exclude: Treatment planning*
- Clark, C. H., Miles, E. A., Urbano, M. T., Bhide, S. A., Bidmead, A. M., Harrington, K. J., . . . UK PARSPORT Trial Management Group, collaborators. (2009). Pre-trial quality assurance processes for an intensity-modulated radiation therapy (IMRT) trial: PARSPORT, a UK multicentre phase III trial comparing conventional radiotherapy and parotid-sparing IMRT for locally advanced head and neck cancer. *British Journal of Radiology*, 82(979), 585-594. *Exclude: Treatment planning*
- Clark, C. H., Mubata, C. D., Meehan, C. A., Bidmead, A. M., Staffurth, J., Humphreys, M. E., & Dearnaley, D. P. (2002). IMRT clinical implementation: Prostate and pelvic node irradiation using helios and a 120-leaf multileaf collimator. *Journal of Applied Clinical Medical Physics*, 3(4), 273-284. *Exclude: Treatment planning*
- Clark, J. I., Eisner, R. M., Hofmeister, C., Norton, J., Thomas, S., Choudhury, A., . . . Emami, B. (2009). Phase I adjuvant radiation with docetaxel in high-risk head and neck cancer. *American Journal of Clinical Oncology*, 32(4), 396-400. *Exclude: Intervention does not include IMRT*
- Claus, F., Duthoy, W., Boterberg, T., De Gerssem, W., Huys, J., Vermeersch, H., & De Neve, W. (2002). Intensity modulated radiation therapy for oropharyngeal and oral cavity tumors: Clinical use and experience. *Oral Oncology*, 38(6), 597-604. *Exclude: Sample size*
- Clavel, S., Nguyen, D. H., Fortin, B., Despres, P., Khaouam, N., Donath, D., . . . Nguyen-Tan, P. F. (2012). Simultaneous integrated boost using intensity-modulated radiotherapy compared with conventional radiotherapy in patients treated with concurrent carboplatin and 5-fluorouracil for locally advanced oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), 582-589. *Exclude: Included in De Neve (2012)*
- Claus, F., Mijnheer, B., Rasch, C., Bortfeld, T., Fraass, B., De Gerssem, W., . . . De Neve, W. (2002). Report of a study on IMRT planning strategies for ethmoid sinus cancer. *Strahlentherapie Und Onkologie*, 178(10), 572-576. *Exclude: Treatment planning*
- Clemente, S., Wu, B., Sanguineti, G., Fusco, V., Ricchetti, F., Wong, J., & McNutt, T. (2011). SmartArc-based volumetric modulated arc therapy for oropharyngeal cancer: A dosimetric comparison with both intensity-modulated radiation therapy and helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 80(4), 1248-1255. *Exclude: Study size*
- Clivio, A., Fogliata, A., Franzetti-Pellanda, A., Nicolini, G., Vanetti, E., Wyttenbach, R., & Cozzi, L. (2009). Volumetric-modulated arc radiotherapy for carcinomas of the anal canal: A treatment planning comparison with fixed field IMRT. *Radiotherapy & Oncology*, 92(1), 118-124. *Exclude: Study size*
- Coles, C. E., Moody, A. M., Wilson, C. B., & Burnet, N. G. (2005). Reduction of radiotherapy-induced late complications in early breast cancer: The role of intensity-modulated radiation therapy and partial breast irradiation. part II--radiotherapy strategies to reduce radiation-induced late effects. *Clinical Oncology (Royal College of Radiologists)*, 17(2), 98-110. *Exclude: Study design (narrative review)*



- Combs, S. E., Burkholder, I., Edler, L., Rieken, S., Habermehl, D., Jakel, O., . . . Debus, J. (2010). Randomised phase I/II study to evaluate carbon ion radiotherapy versus fractionated stereotactic radiotherapy in patients with recurrent or progressive gliomas: The CINDERELLA trial. *BMC Cancer*, *10*, 533. *Exclude: Study design (narrative description of clinical trial)*
- Combs, S. E., Ellerbrock, M., Haberer, T., Habermehl, D., Hoess, A., Jakel, O., . . . Debus, J. (2010). Heidelberg ion therapy center (HIT): Initial clinical experience in the first 80 patients. *Acta Oncologica*, *49*(7), 1132-1140. *Exclude: Intervention not of interest (carbon and proton therapies)*
- Combs, S. E., Thilmann, C., Debus, J., & Schulz-Ertner, D. (2005). Precision radiotherapy for hemangiopericytomas of the central nervous system. *Cancer*, *104*(11), 2457-2465. *Exclude: Outcomes not specific to IMRT*
- Coon, A. B., Dickler, A., Kirk, M. C., Liao, Y., Shah, A. P., Strauss, J. B., . . . Griem, K. L. (2010). Tomotherapy and multifield intensity-modulated radiotherapy planning reduce cardiac doses in left-sided breast cancer patients with unfavorable cardiac anatomy. *International Journal of Radiation Oncology, Biology, Physics*, *78*(1), 104-110. *Exclude: Study size*
- Corry, J., Hornby, C., Fisher, R., D'Costa, I., Porceddu, S., Rischin, D., & Peters, L. J. (2004). 'Boomerang' technique: An improved method for conformal treatment of locally advanced nasopharyngeal cancer. *Australasian Radiology*, *48*(2), 170-180. *Exclude: Treatment planning*
- Corvo, R. (2007). Evidence-based radiation oncology in head and neck squamous cell carcinoma. *Radiotherapy & Oncology*, *85*(1), 156-170. *Exclude: Study design (narrative review)*
- Cotrutz, C., & Xing, L. (2003). IMRT dose shaping with regionally variable penalty scheme. *Medical Physics*, *30*(4), 544-551. *Exclude: Treatment planning*
- Cotrutz, C., & Xing, L. (2003). Segment-based dose optimization using a genetic algorithm. *Physics in Medicine & Biology*, *48*(18), 2987-2998. *Exclude: Treatment planning*
- Cotter, S. E., Herrup, D. A., Friedmann, A., Macdonald, S. M., Pieretti, R. V., Robinson, G., . . . Yock, T. I. (2011). Proton radiotherapy for pediatric bladder/prostate rhabdomyosarcoma: Clinical outcomes and dosimetry compared to intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, *81*(5), 1367-1373. *Exclude: Study size*
- Court, L. E., Jahnke, L., Chin, D., Song, J., Cormack, R., Zygmanski, P., . . . Chin, L. (2006). Dynamic IMRT treatments of sinus region tumors: Comparison of monte carlo calculations with treatment planning system calculations and ion chamber measurements. *Technology in Cancer Research & Treatment*, *5*(5), 489-495. *Exclude: Treatment planning*
- Cozzarini, C., Fiorino, C., Da Pozzo, L. F., Alongi, F., Berardi, G., Bolognesi, A., . . . Di Muzio, N. (2012). Clinical factors predicting late severe urinary toxicity after postoperative radiotherapy for prostate carcinoma: A single-institute analysis of 742 patients. *International Journal of Radiation Oncology, Biology, Physics*, *82*(1), 191-199. *Exclude: Intervention not of interest (radiotherapy – unspecified)*
- Cozzi, L., Dinshaw, K. A., Shrivastava, S. K., Mahantshetty, U., Engineer, R., Deshpande, D. D., . . . Fogliata, A. (2008). A treatment planning study comparing volumetric arc modulation with RapidArc and fixed field IMRT for cervix uteri radiotherapy. *Radiotherapy & Oncology*, *89*(2), 180-191. *Exclude: Study size*
- Cozzi, L., Fogliata, A., Bolsi, A., Nicolini, G., & Bernier, J. (2004). Three-dimensional conformal vs. intensity-modulated radiotherapy in head-and-neck cancer patients: Comparative analysis of dosimetric and technical parameters. *International Journal of Radiation Oncology, Biology, Physics*, *58*(2), 617-624. *Exclude: Date*
- Cozzi, L., Fogliata, A., Nicolini, G., & Bernier, J. (2005). Clinical experience in breast irradiation with intensity modulated photon beams. *Acta Oncologica*, *44*(5), 467-474. *Exclude: Date*
- Crehange, G., Maingon, P., Gauthier, M., Parfait, S., Cochet, A., Mirjolet, C., . . . Walker, P. (2011). Early choline levels from 3-tesla MR spectroscopy after exclusive radiation therapy in patients with clinically localized prostate cancer are predictive of plasmatic levels of PSA at 1 year. *International Journal of Radiation Oncology, Biology, Physics*, *81*(4), e407-13. *Exclude: Outcome not of interest (citrate and choline levels)*

- Croog, V. J., Wu, A. J., McCormick, B., & Beal, K. P. (2009). Accelerated whole breast irradiation with intensity-modulated radiotherapy to the prone breast. *International Journal of Radiation Oncology, Biology, Physics*, 73(1), 88-93. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Crooks, S. M., McAven, L. F., Robinson, D. F., & Xing, L. (2002). Minimizing delivery time and monitor units in static IMRT by leaf-sequencing. *Physics in Medicine & Biology*, 47(17), 3105-3116. *Exclude: Treatment planning*
- Dabaja, B., Salehpour, M. R., Rosen, I., Tung, S., Morrison, W. H., Ang, K. K., & Garden, A. S. (2005). Intensity-modulated radiation therapy (IMRT) of cancers of the head and neck: Comparison of split-field and whole-field techniques. *International Journal of Radiation Oncology, Biology, Physics*, 63(4), 1000-1005. *Exclude: Study size*
- Dagan, R., Morris, C. G., Kirwan, J. M., Werning, J. W., Vaysberg, M., Amdur, R. J., & Mendenhall, W. M. (2010). Elective neck dissection during salvage surgery for locally recurrent head and neck squamous cell carcinoma after radiotherapy with elective nodal irradiation. *Laryngoscope*, 120(5), 945-952. *Exclude: Intervention not of interest (salvage surgery)*
- Dahele, M., Skinner, M., Schultz, B., Cardoso, M., Bell, C., & Ung, Y. C. (2010). Adjuvant radiotherapy for gastric cancer: A dosimetric comparison of 3-dimensional conformal radiotherapy, tomotherapy and conventional intensity modulated radiotherapy treatment plans. *Medical Dosimetry*, 35(2), 115-121. *Exclude: Study size*
- D'Amico, A. V., Manola, J., McMahon, E., Loffredo, M., Lopes, L., Ching, J., . . . Beard, C. (2006). A prospective evaluation of rectal bleeding after dose-escalated three-dimensional conformal radiation therapy using an intrarectal balloon for prostate gland localization and immobilization. *Urology*, 67(4), 780-784. *Exclude: Intervention not of interest (3D-CRT)*
- D'Amico, A. V., Renshaw, A. A., Loffredo, B., & Chen, M. H. (2007). Duration of testosterone suppression and the risk of death from prostate cancer in men treated using radiation and 6 months of hormone therapy. *Cancer*, 110(8), 1723-1728. *Exclude: Intervention not of interest (androgen suppression)*
- Dandekar, P., Partridge, M., Kazi, R., Nutting, C., Harrington, K., & Newbold, K. (2010). Challenges in integrating 18FDG PET-CT into radiotherapy planning of head and neck cancer. *Indian Journal of Cancer*, 47(3), 260-266. *Exclude: Treatment planning*
- D'Andrea, M., Laccarino, G., Carpino, S., Strigari, L., & Benassi, M. (2007). Primary photon fluence extraction from portal images acquired with an amorphous silicon flat panel detector: Experimental determination of a scatter filter. *Journal of Experimental & Clinical Cancer Research*, 26(1), 125-132. *Exclude: Treatment planning*
- Das, I. J., Cheng, C. W., Chopra, K. L., Mitra, R. K., Srivastava, S. P., & Glatstein, E. (2008). Intensity-modulated radiation therapy dose prescription, recording, and delivery: Patterns of variability among institutions and treatment planning systems. *Journal of the National Cancer Institute*, 100(5), 300-307. *Exclude: Treatment planning*
- de Arruda, F. F., Puri, D. R., Zhung, J., Narayana, A., Wolden, S., Hunt, M., . . . Lee, N. Y. (2006). Intensity-modulated radiation therapy for the treatment of oropharyngeal carcinoma: The memorial sloan-kettering cancer center experience. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 363-373. *Exclude: Date*
- De Deene, Y., Vergote, K., Claeys, C., & De Wagter, C. (2006). The fundamental radiation properties of normoxic polymer gel dosimeters: A comparison between a methacrylic acid based gel and acrylamide based gels. *Physics in Medicine & Biology*, 51(3), 653-673. *Exclude: Treatment planning*
- De La Fuente Herman, T., Ahmad And, S., & Vlachaki, M. T. (2010). Intensity modulated radiation therapy versus three dimensional conformal radiation therapy for treatment of high grade glioma: A radiobiological modeling study. *Journal of X-Ray Science & Technology*, 18(4), 393-402. *Exclude: Study size*
- De Meerleer, G., Fonteyne, V., Meersschout, S., Van den Broecke, C., Villeirs, G., Lumen, N., . . . De Neve, W. (2008). Salvage intensity-modulated radiotherapy for rising PSA after radical prostatectomy. *Radiotherapy & Oncology*, 89(2), 205-213. *Exclude: Date*

- De Meerleer, G., Vakaet, L., De Gersem, W., Villeirs, G., & De Neve, W. (2004). Direct segment aperture and weight optimization for intensity-modulated radiotherapy of prostate cancer. *Strahlentherapie Und Onkologie*, 180(3), 136-143. *Exclude: Study size*
- De Meerleer, G., Vandecasteele, K., Ost, P., Delrue, L., Denys, H., Makar, A., . . . De Neve, W. (2011). Whole abdominopelvic radiotherapy using intensity-modulated arc therapy in the palliative treatment of chemotherapy-resistant ovarian cancer with bulky peritoneal disease: A single-institution experience. *International Journal of Radiation Oncology, Biology, Physics*, 79(3), 775-781. *Exclude: Study size*
- De Neve, W., Claus, F., Duthoy, W., De Meerleer, G., & De Wagter, C. (2002). Intensity modulation techniques for improvement of normal tissue tolerance. *Frontiers of Radiation Therapy & Oncology*, 37, 163-173. *Exclude: Study design (narrative)*
- de Pooter, J. A., Mendez Romero, A., Wunderink, W., Storchi, P. R., & Heijmen, B. J. (2008). Automated non-coplanar beam direction optimization improves IMRT in SBRT of liver metastasis. *Radiotherapy & Oncology*, 88(3), 376-381. *Exclude: Study size*
- De Salles, A. A., Gorgulho, A. A., Selch, M., De Marco, J., & Agazaryan, N. (2008). Radiosurgery from the brain to the spine: 20 years experience. *Acta Neurochirurgica - Supplement*, 101, 163-168. *Exclude: Treatment planning*
- De Smedt, B., Fippel, M., Reynaert, N., & Thierens, H. (2006). Denoising of monte carlo dose calculations: Smoothing capabilities versus introduction of systematic bias. *Medical Physics*, 33(6), 1678-1687. *Exclude: Treatment planning*
- De Smedt, B., Vanderstraeten, B., Reynaert, N., De Neve, W., & Thierens, H. (2005). Investigation of geometrical and scoring grid resolution for monte carlo dose calculations for IMRT. *Physics in Medicine & Biology*, 50(17), 4005-4019. *Exclude: Treatment planning*
- Dearnaley, D., Syndikus, I., Sumo, G., Bidmead, M., Bloomfield, D., Clark, C., . . . Hall, E. (2012). Conventional versus hypofractionated high-dose intensity-modulated radiotherapy for prostate cancer: Preliminary safety results from the CHHiP randomised controlled trial. *Lancet Oncology*, 13(1), 43-54. *Exclude: Outcomes not specific to IMRT*
- Deasy, J. O., Moiseenko, V., Marks, L., Chao, K. S., Nam, J., & Eisbruch, A. (2010). Radiotherapy dose-volume effects on salivary gland function. *International Journal of Radiation Oncology, Biology, Physics*, 76(3 Suppl), S58-63. *Exclude: Treatment planning*
- Deb, P., & Fielding, A. (2009). Radiobiological model comparison of 3D conformal radiotherapy and IMRT plans for the treatment of prostate cancer. *Australasian Physical & Engineering Sciences in Medicine*, 32(2), 51-61. *Exclude: Treatment planning*
- Deeley, M. A., Chen, A., Datteri, R., Noble, J. H., Cmelak, A. J., Donnelly, E. F., . . . Dawant, B. M. (2011). Comparison of manual and automatic segmentation methods for brain structures in the presence of space-occupying lesions: A multi-expert study. *Physics in Medicine & Biology*, 56(14), 4557-4577. *Excluded: Outcome not of interest (expert vs automatic segmentation methods)*
- Dehghanpour, M., & Pham, H. (2004). A retrospective analysis to determine if the timing of H&D curve production has a clinically significant effect on the percent difference in agreement of isodose delivery for film-based IMRT QA. *Medical Dosimetry*, 29(2), 122-123. *Exclude: Treatment planning*
- DeLand, M. M., Weiss, R. A., McDaniel, D. H., & Geronemus, R. G. (2007). Treatment of radiation-induced dermatitis with light-emitting diode (LED) photomodulation. *Lasers in Surgery & Medicine*, 39(2), 164-168. *Exclude: Study size*
- Demanas, D. J., Rodriguez, R. R., Schour, L., Brandt, D., & Altieri, G. (2005). High-dose-rate intensity-modulated brachytherapy with external beam radiotherapy for prostate cancer: California endocurietherapy's 10-year results. *International Journal of Radiation Oncology, Biology, Physics*, 61(5), 1306-1316. *Exclude: Date*

- Dempsey, J. F., Romeijn, H. E., Li, J. G., Low, D. A., & Palta, J. R. (2005). A fourier analysis of the dose grid resolution required for accurate IMRT fluence map optimization. *Medical Physics*, 32(2), 380-388. *Exclude: Treatment planning*
- Den, R. B., Doemer, A., Kubicek, G., Bednarz, G., Galvin, J. M., Keane, W. M., . . . Machtay, M. (2010). Daily image guidance with cone-beam computed tomography for head-and-neck cancer intensity-modulated radiotherapy: A prospective study. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1353-1359. *Exclude: Treatment planning*
- Descovich, M., Fowble, B., Bevan, A., Schechter, N., Park, C., & Xia, P. (2010). Comparison between hybrid direct aperture optimized intensity-modulated radiotherapy and forward planning intensity-modulated radiotherapy for whole breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 91-99. : *Study size*
- Deutsch, I., Zelefsky, M. J., Zhang, Z., Mo, Q., Zaider, M., Cohen, G., . . . Yamada, Y. (2010). Comparison of PSA relapse-free survival in patients treated with ultra-high-dose IMRT versus combination HDR brachytherapy and IMRT. *Brachytherapy*, 9(4), 313-318. *Exclude: Treatment planning*
- Deville, C., Both, S., Hwang, W. T., Tochner, Z., & Vapiwala, N. (2010). Clinical toxicities and dosimetric parameters after whole-pelvis versus prostate-only intensity-modulated radiation therapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 78(3), 763-772. *Exclude: Results discussed in a later paper (see Deville 2012)*
- Deville, C., Vapiwala, N., Hwang, W. T., Lin, H., Ad, V. B., Tochner, Z., et al. (2012). Comparative toxicity and dosimetric profile of whole-pelvis versus prostate bed-only intensity-modulated radiation therapy after prostatectomy. *International Journal of Radiation Oncology, Biology, Physics*, 82(4), 1389-1396. *Exclude: Treatment planning*
- Devisetty, K., Zorn, K. C., Katz, M. H., Jani, A. B., & Liauw, S. L. (2010). External beam radiation therapy after transurethral resection of the prostate: A report on acute and late genitourinary toxicity. *International Journal of Radiation Oncology, Biology, Physics*, 77(4), 1060-1065. *Exclude: Outcomes not specific to IMRT*
- Dhabaan, A., Elder, E., Schreiber, E., Crocker, I., Curran, W. J., Oyesiku, N. M., . . . Fox, T. (2010). Dosimetric performance of the new high-definition multileaf collimator for intracranial stereotactic radiosurgery. *Journal of Applied Clinical Medical Physics*, 11(3), 3040. *Exclude: Intervention not of interest (stereotactic radiosurgery)*
- Dickie, C. I., Parent, A. L., Chung, P. W., Catton, C. N., Craig, T., Griffin, A. M., . . . O'Sullivan, B. (2010). Measuring interfractional and intrafractional motion with cone beam computed tomography and an optical localization system for lower extremity soft tissue sarcoma patients treated with preoperative intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 78(5), 1437-1444. *Exclude: Treatment planning*
- Digesu, C., Cilla, S., De Gaetano, A., Massaccesi, M., Macchia, G., Ippolito, E., . . . Morganti, A. G. (2011). Postoperative intensity modulated radiation therapy in high risk prostate cancer: A dosimetric comparison. *Medical Dosimetry*, 36(3), 231-239. *Exclude: Study size*
- Dijkema, T., Raaijmakers, C. P., Ten Haken, R. K., Roesink, J. M., Braam, P. M., Houweling, A. C., . . . Terhaard, C. H. (2010). Parotid gland function after radiotherapy: The combined michigan and utrecht experience. *International Journal of Radiation Oncology, Biology, Physics*, 78(2), 449-453. *Exclude: Treatment planning*
- Dijkema, T., Terhaard, C. H., Roesink, J. M., Braam, P. M., van Gils, C. H., Moerland, M. A., & Raaijmakers, C. P. (2008). Large cohort dose-volume response analysis of parotid gland function after radiotherapy: Intensity-modulated versus conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1101-1109. *Exclude: Date*

- Ding, C., Chang, C. H., Haslam, J., Timmerman, R., & Solberg, T. (2010). A dosimetric comparison of stereotactic body radiation therapy techniques for lung cancer: Robotic versus conventional linac-based systems. *Journal of Applied Clinical Medical Physics*, 11(3), 3223. *Exclude: Study size*
- Ding, M., Newman, F., Chen, C., Stuhr, K., & Gaspar, L. E. (2009). Dosimetric comparison between 3DCRT and IMRT using different multileaf collimators in the treatment of brain tumors. *Medical Dosimetry*, 34(1), 1-8. *Exclude: Study size*
- Ding, M., Newman, F., & Raben, D. (2005). New radiation therapy techniques for the treatment of head and neck cancer. *Otolaryngologic Clinics of North America*, 38(2), 371-395. *Exclude: Date*
- Dini, S. A., Koon, R. A., Ashburn, J. R., & Meigoonia, A. S. (2005). Dosimetric evaluation of GAFCHROMIC XR type T and XR type R films. *Journal of Applied Clinical Medical Physics*, 6(1), 114-134. *Exclude: Treatment planning*
- Diot, Q., Olsen, C., Kavanagh, B., Raben, D., & Miften, M. (2011). Dosimetric effect of online image-guided anatomical interventions for postprostatectomy cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 79(2), 623-632. *Exclude: Study size*
- Dirix, P., & Nuyts, S. (2010). Evidence-based organ-sparing radiotherapy in head and neck cancer. *Lancet Oncology*, 11(1), 85-91. *Exclude: Study design (narrative review)*
- Dirix, P., & Nuyts, S. (2010). Value of intensity-modulated radiotherapy in stage IV head-and-neck squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 78(5), 1373-1380. *Exclude: Study size*
- Dirix, P., Nuyts, S., Vanstraelen, B., Nulens, A., Hermans, R., Jorissen, M., . . . Van den Bogaert, W. (2007). Post-operative intensity-modulated radiotherapy for malignancies of the nasal cavity and paranasal sinuses. *Radiotherapy & Oncology*, 85(3), 385-391. *Exclude: Date*
- Dirix, P., Vanstraelen, B., Jorissen, M., Vander Poorten, V., & Nuyts, S. (2010). Intensity-modulated radiotherapy for sinonasal cancer: Improved outcome compared to conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 78(4), 998-1004. *Exclude: Study size*
- Djajaputra, D., Wu, Q., Wu, Y., & Mohan, R. (2003). Algorithm and performance of a clinical IMRT beam-angle optimization system. *Physics in Medicine & Biology*, 48(19), 3191-3212. *Exclude: Treatment planning*
- Djouguela, A., Kollhoff, R., Ruhmann, A., Willborn, K. C., Harder, D., & Poppe, B. (2006). Physical mechanism of the schwarzschild effect in film dosimetry--theoretical model and comparison with experiments. *Physics in Medicine & Biology*, 51(17), 4345-4356. *Exclude: Treatment planning*
- Do, L., Pezner, R., Radany, E., Liu, A., Staud, C., & Badie, B. (2009). Resection followed by stereotactic radiosurgery to resection cavity for intracranial metastases. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 486-491. *Exclude: Intervention not of interest (WBRT, SRS, SRT)*
- Dobler, B., Koelbl, O., Bogner, L., & Pohl, F. (2009). Direct machine parameter optimization for intensity modulated radiation therapy (IMRT) of oropharyngeal cancer--a planning study. *Journal of Applied Clinical Medical Physics*, 10(4), 3066. *Exclude: Study size*
- Dobler, B., Lorenz, F., Wertz, H., Polednik, M., Wolff, D., Steil, V., . . . Wenz, F. (2006). Intensity-modulated radiation therapy (IMRT) with different combinations of treatment-planning systems and linacs: Issues and how to detect them. *Strahlentherapie Und Onkologie*, 182(8), 481-488. *Exclude: Treatment planning*
- Dobler, B., Streck, N., Klein, E., Loeschel, R., Haertl, P., & Koelbl, O. (2010). Hybrid plan verification for intensity-modulated radiation therapy (IMRT) using the 2D ionization chamber array IMRT MatriXX--a feasibility study. *Physics in Medicine & Biology*, 55(2), N39-55. *Exclude: Treatment planning*
- Dogan, N., & Glasgow, G. P. (2003). Surface and build-up region dosimetry for obliquely incident intensity modulated radiotherapy 6 MV x rays. *Medical Physics*, 30(12), 3091-3096. *Exclude: Treatment planning*
- Dogan, N., Leybovich, L. B., King, S., Sethi, A., & Emami, B. (2002). Improvement of treatment plans developed with intensity-modulated radiation therapy for concave-shaped head and neck tumors. *Radiology*, 223(1), 57-64. *Exclude: Sample size*

- Dogan, N., Leybovich, L. B., & Sethi, A. (2002). Comparative evaluation of kodak EDR2 and XV2 films for verification of intensity modulated radiation therapy. *Physics in Medicine & Biology*, 47(22), 4121-4130. Exclude: Treatment planning
- Dogan, N., Leybovich, L. B., Sethi, A., & Emami, B. (2003). Automatic feathering of split fields for step-and-shoot intensity modulated radiation therapy. *Physics in Medicine & Biology*, 48(9), 1133-1140. Exclude: Treatment planning
- Dogan, N., Siebers, J. V., & Keall, P. J. (2006). Clinical comparison of head and neck and prostate IMRT plans using absorbed dose to medium and absorbed dose to water. *Physics in Medicine & Biology*, 51(19), 4967-4980. Exclude: Treatment planning
- Donovan, E., Bleakley, N., Denholm, E., Evans, P., Gothard, L., Hanson, J., . . . Breast Technology, G. (2007). Randomised trial of standard 2D radiotherapy (RT) versus intensity modulated radiotherapy (IMRT) in patients prescribed breast radiotherapy. *Radiotherapy & Oncology*, 82(3), 254-264. Exclude: Included in systematic review (Hayes 2012 [whole breast])
- Donovan, E. M., Bleackley, N. J., Evans, P. M., Reise, S. F., & Yarnold, J. R. (2002). Dose-position and dose-volume histogram analysis of standard wedged and intensity modulated treatments in breast radiotherapy. *British Journal of Radiology*, 75(900), 967-973. Exclude: Treatment planning
- Dornfeld, K., Hopkins, S., Simmons, J., Spitz, D. R., Menda, Y., Graham, M., . . . Buatti, J. (2008). Posttreatment FDG-PET uptake in the supraglottic and glottic larynx correlates with decreased quality of life after chemoradiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 386-392. Exclude: Treatment planning
- Dorr, W., Jaal, J., & Zips, D. (2007). Prostate cancer: Biological dose considerations and constraints in tele- and brachytherapy. *Strahlentherapie Und Onkologie*, 183(Spec 2), 14-15. Exclude: Date
- Dowdell, S. J., Metcalfe, P. E., Morales, J. E., Jackson, M., & Rosenfeld, A. B. (2008). A comparison of proton therapy and IMRT treatment plans for prostate radiotherapy. *Australasian Physical & Engineering Sciences in Medicine*, 31(4), 325-331. Exclude: Study size
- Dolezel, M., Odratzka, K., Vaculikova, M., Vanasek, J., Sefrova, J., Paluska, P., . . . Hartmann, I. (2010). Dose escalation in prostate radiotherapy up to 82 Gy using simultaneous integrated boost: Direct comparison of acute and late toxicity with 3D-CRT 74 Gy and IMRT 78 Gy. *Strahlentherapie Und Onkologie*, 186(4), 197-202. Exclude: Included in De Neve (2012)
- D'Souza, W. D., Ahamad, A. A., Iyer, R. B., Salehpour, M. R., Jhingran, A., & Eifel, P. J. (2005). Feasibility of dose escalation using intensity-modulated radiotherapy in posthysterectomy cervical carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 61(4), 1062-1070. Exclude: Study size
- D'Souza, W. D., Meyer, R. R., & Shi, L. (2004). Selection of beam orientations in intensity-modulated radiation therapy using single-beam indices and integer programming. *Physics in Medicine & Biology*, 49(15), 3465-3481. Exclude: Treatment planning
- Ducic, Y. (2004). Orbitozygomatic resection of meningiomas of the orbit. *Laryngoscope*, 114(1), 164-170. Exclude: Study size
- Duma, M. N., Kampfer, S., Wilkens, J. J., Schuster, T., Molls, M., & Geinitz, H. (2010). Comparative analysis of an image-guided versus a non-image-guided setup approach in terms of delivered dose to the parotid glands in head-and-neck cancer IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 77(4), 1266-1273. Exclude: Study size
- Dusenbery, K. E., Bellairs, E. E., Potish, R. A., Twiggs, L. B., & Boente, M. P. (2005). Twenty-five year outcome of sequential abdominal radiotherapy and melphalan: Implications for future management of epithelial carcinoma of the ovary. *Gynecologic Oncology*, 96(2), 307-313. Exclude: Intervention not specific to IMRT (radiotherapy)

- Duthoy, W., Boterberg, T., Claus, F., Ost, P., Vakaet, L., Bral, S., . . . De Neve, W. (2005). Postoperative intensity-modulated radiotherapy in sinonasal carcinoma: Clinical results in 39 patients. *Cancer*, *104*(1), 71-82. *Exclude: Date*
- Duthoy, W., De Gerssem, W., Vergote, K., Boterberg, T., Derie, C., Smeets, P., . . . De Neve, W. (2004). Clinical implementation of intensity-modulated arc therapy (IMAT) for rectal cancer. *International Journal of Radiation Oncology, Biology, Physics*, *60*(3), 794-806. *Exclude: Study size*
- Eade, T. N., Horwitz, E. M., Ruth, K., Buyyounouski, M. K., D'Ambrosio, D. J., Feigenberg, S. J., . . . Pollack, A. (2008). A comparison of acute and chronic toxicity for men with low-risk prostate cancer treated with intensity-modulated radiation therapy or (125)I permanent implant. *International Journal of Radiation Oncology, Biology, Physics*, *71*(2), 338-345. *Exclude: Date*
- Earl, M. A., Shepard, D. M., Naqvi, S., Li, X. A., & Yu, C. X. (2003). Inverse planning for intensity-modulated arc therapy using direct aperture optimization. *Physics in Medicine & Biology*, *48*(8), 1075-1089. *Exclude: Treatment planning*
- Eberle, K., Engler, J., Hartmann, G., Hofmann, R., & Horandel, J. R. (2003). First tests of a liquid ionization chamber to monitor intensity modulated radiation beams. *Physics in Medicine & Biology*, *48*(21), 3555-3564. *Exclude: Treatment planning*
- Eccles, C. L., Bissonnette, J. P., Craig, T., Taremi, M., Wu, X., & Dawson, L. A. (2008). Treatment planning study to determine potential benefit of intensity-modulated radiotherapy versus conformal radiotherapy for unresectable hepatic malignancies. *International Journal of Radiation Oncology, Biology, Physics*, *72*(2), 582-588. *Exclude: Treatment planning*
- Edlund, T., Zimmer, J. R., & Gannett, D. E. (2004). IMRT for the treatment of prostate cancer: A comparison of a forward-planned technique and an inverse-planned technique utilizing a dose gradient method. *Medical Dosimetry*, *29*(2), 128-133. *Exclude: Treatment planning*
- Edwards, C. R., & Mountford, P. J. (2004). Near surface photon energy spectra outside a 6 MV field edge. *Physics in Medicine & Biology*, *49*(18), N293-301. *Exclude: Treatment planning*
- Efstathiou, J. A., Trofimov, A. V., & Zietman, A. L. (2009). Life, liberty, and the pursuit of protons: An evidence-based review of the role of particle therapy in the treatment of prostate cancer. *Cancer Journal*, *15*(4), 312-318. *Exclude: Intervention not of interest (proton beam therapy)*
- Eisbruch, A. (2009). Radiotherapy: IMRT reduces xerostomia and potentially improves QoL. *Nature Reviews Clinical Oncology*, *6*(10), 567-568. *Exclude: Study design (news article)*
- Eisbruch, A., Foote, R. L., O'Sullivan, B., Beitler, J. J., & Vikram, B. (2002). Intensity-modulated radiation therapy for head and neck cancer: Emphasis on the selection and delineation of the targets. *Seminars in Radiation Oncology*, *12*(3), 238-249. *Exclude: Date*
- Eisbruch, A., Levendag, P. C., Feng, F. Y., Teguh, D., Lyden, T., Schmitz, P. I., . . . Heijmen, B. J. (2007). Can IMRT or brachytherapy reduce dysphagia associated with chemoradiotherapy of head and neck cancer? the michigan and rotterdam experiences. *International Journal of Radiation Oncology, Biology, Physics*, *69*(2 Suppl), S40-2. *Exclude: Date*
- Eisbruch, A., Marsh, L. H., Dawson, L. A., Bradford, C. R., Teknos, T. N., Chepeha, D. B., . . . Wolf, G. T. (2004). Recurrences near base of skull after IMRT for head-and-neck cancer: Implications for target delineation in high neck and for parotid gland sparing. *International Journal of Radiation Oncology, Biology, Physics*, *59*(1), 28-42. *Exclude: Date*
- Eisbruch, A., Schwartz, M., Rasch, C., Vineberg, K., Damen, E., Van As, C. J., . . . Balm, A. J. (2004). Dysphagia and aspiration after chemoradiotherapy for head-and-neck cancer: Which anatomic structures are affected and can they be spared by IMRT?. *International Journal of Radiation Oncology, Biology, Physics*, *60*(5), 1425-1439. *Exclude: Date*

- Eisbruch, A., Ship, J. A., Dawson, L. A., Kim, H. M., Bradford, C. R., Terrell, J. E., . . . Wolf, G. T. (2003). Salivary gland sparing and improved target irradiation by conformal and intensity modulated irradiation of head and neck cancer. *World Journal of Surgery*, 27(7), 832-837. *Exclude: Date*
- El Naqa, I., Kawrakow, I., Fippel, M., Siebers, J. V., Lindsay, P. E., Wickerhauser, M. V., . . . Deasy, J. O. (2005). A comparison of monte carlo dose calculation denoising techniques. *Physics in Medicine & Biology*, 50(5), 909-922. *Exclude: Treatment planning*
- Eldebawy, E., Parker, W., Abdel Rahman, W., & Freeman, C. R. (2012). Dosimetric study of current treatment options for radiotherapy in retinoblastoma. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), e501-5. *Exclude: Study size*
- Eller, L. S., Lev, E. L., Gejerman, G., Colella, J., Esposito, M., Lanteri, V., . . . Sawczuk, I. (2006). Prospective study of quality of life of patients receiving treatment for prostate cancer. *Nursing Research*, 55(2 Suppl), S28-36. *Exclude: Date*
- Elshaikh, M. A., Mahmoud-Ahmed, A. S., Kinney, S. E., Wood, B. G., Lee, J. H., Barnett, G. H., & Suh, J. H. (2002). Recurrent head-and-neck chemodectomas: A comparison of surgical and radiotherapeutic results. *International Journal of Radiation Oncology, Biology, Physics*, 52(4), 953-956. *Exclude: Date*
- Emami, B., Sethi, A., & Petruzzelli, G. J. (2003). Influence of MRI on target volume delineation and IMRT planning in nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 57(2), 481-488. *Exclude: Sample size*
- Emmens, D. J., & James, H. V. (2010). Irregular surface compensation for radiotherapy of the breast: Correlating depth of the compensation surface with breast size and resultant dose distribution. *British Journal of Radiology*, 83(986), 159-165. *Exclude: Treatment planning*
- Emory, C. L., Montgomery, C. O., Potter, B. K., Keisch, M. E., & Conway, S. A. (2012). Early complications of high-dose-rate brachytherapy in soft tissue sarcoma: A comparison with traditional external-beam radiotherapy. *Clinical Orthopaedics & Related Research*, 470(3), 751-758. *Exclude: Comparator not of interest (brachytherapy)*
- Engelsman, M., Remeijer, P., van Herk, M., Mijnheer, B., & Damen, E. (2003). The theoretical benefit of beam fringe compensation and field size reduction for iso-normal tissue complication probability dose escalation in radiotherapy of lung cancer. *Medical Physics*, 30(6), 1086-1095. *Exclude: Treatment planning*
- Engstrom, P. E., Haraldsson, P., Landberg, T., Sand Hansen, H., Aage Engelholm, S., & Nystrom, H. (2005). In vivo dose verification of IMRT treated head and neck cancer patients. *Acta Oncologica*, 44(6), 572-578. *Exclude: Study size*
- Eppinga, W., Lagerwaard, F., Verbakel, W., Slotman, B., & Senan, S. (2010). Volumetric modulated arc therapy for advanced pancreatic cancer. *Strahlentherapie Und Onkologie*, 186(7), 382-387. *Exclude: Study size*
- Ercan, T., Igdem, S., Alco, G., Zengin, F., Atilla, S., Dincer, M., & Okkan, S. (2010). Dosimetric comparison of field in field intensity-modulated radiotherapy technique with conformal radiotherapy techniques in breast cancer. *Japanese Journal of Radiology*, 28(4), 283-289. *Exclude: Treatment planning*
- Ernst-Stecken, A., Lambrecht, U., Ganslandt, O., Mueller, R., Fahlbusch, R., Sauer, R., & Grabenbauer, G. (2005). Radiosurgery of small skull-base lesions. no advantage for intensity-modulated stereotactic radiosurgery versus conformal arc technique. *Strahlentherapie Und Onkologie*, 181(5), 336-344. *Exclude: Intervention not of interest (intensity-modulated stereotactic radiotherapy)*
- Estall, V., Fairfoul, J., Jena, R., Jefferies, S. J., Burton, K. E., & Burnet, N. G. (2010). Skull base meningioma - comparison of intensity-modulated radiotherapy planning techniques using the moduleaf micro-multileaf collimator and helical tomotherapy. *Clinical Oncology (Royal College of Radiologists)*, 22(3), 179-184. *Exclude: Study size*



- Estall, V. J., Eaton, D., Burton, K. E., Jefferies, S. J., Jena, R., & Burnet, N. G. (2010). Intensity-modulated radiotherapy plan optimisation for skull base lesions: Practical class solutions for dose escalation. *Clinical Oncology (Royal College of Radiologists)*, 22(4), 313-320. *Exclude: Treatment planning*
- Esthappan, J., Chaudhari, S., Santanam, L., Mutic, S., Olsen, J., Macdonald, D. M., . . . Grigsby, P. W. (2008). Prospective clinical trial of positron emission tomography/computed tomography image-guided intensity-modulated radiation therapy for cervical carcinoma with positive para-aortic lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1134-1139. *Exclude: Study size*
- Esthappan, J., Mutic, S., Harms, W. B., Dempsey, J. F., & Low, D. A. (2002). Dosimetry of therapeutic photon beams using an extended dose range film. *Medical Physics*, 29(10), 2438-2445. *Exclude: Treatment planning*
- Evans, P. M. (2008). Anatomical imaging for radiotherapy. *Physics in Medicine & Biology*, 53(12), R151-91. *Exclude: Treatment planning*
- Ezzell, L. C., Hansen, E. K., Quivey, J. M., & Xia, P. (2007). Detection of treatment setup errors between two CT scans for patients with head and neck cancer. *Medical Physics*, 34(8), 3233-3242. *Exclude: Study size*
- Fang, F. M., Chien, C. Y., Tsai, W. L., Chen, H. C., Hsu, H. C., Lui, C. C., . . . Huang, H. Y. (2008). Quality of life and survival outcome for patients with nasopharyngeal carcinoma receiving three-dimensional conformal radiotherapy vs. intensity-modulated radiotherapy-a longitudinal study. *International Journal of Radiation Oncology, Biology, Physics*, 72(2), 356-364. *Exclude: Date*
- Fang, F. M., Tsai, W. L., Chen, H. C., Hsu, H. C., Hsiung, C. Y., Chien, C. Y., & Ko, S. F. (2007). Intensity-modulated or conformal radiotherapy improves the quality of life of patients with nasopharyngeal carcinoma: Comparisons of four radiotherapy techniques. *Cancer*, 109(2), 313-321. *Exclude: Date*
- Farivar, A. S., Louie, B. E., Aye, R. W., Horton, M. P., & Vallieres, E. (2012). Extrapleural pneumonectomy for primary pleural mullerian tumor in a young woman. *Annals of Thoracic Surgery*, 93(1), e1-2. *Exclude: Study size*
- Fatyg, M., Williamson, J. F., Dogan, N., Todor, D., Siebers, J. V., George, R., . . . Hagan, M. (2009). A comparison of HDR brachytherapy and IMRT techniques for dose escalation in prostate cancer: A radiobiological modeling study. *Medical Physics*, 36(9), 3995-4006. *Exclude: Study size*
- Feigenberg, S. J., Paskalev, K., McNeeley, S., Horwitz, E. M., Konski, A., Wang, L., . . . Pollack, A. (2007). Comparing computed tomography localization with daily ultrasound during image-guided radiation therapy for the treatment of prostate cancer: A prospective evaluation. *Journal of Applied Clinical Medical Physics*, 8(3), 2268. *Exclude: Study size*
- Feng, M., Balter, J. M., Normolle, D., Adusumilli, S., Cao, Y., Chenevert, T. L., & Ben-Josef, E. (2009). Characterization of pancreatic tumor motion using cine MRI: Surrogates for tumor position should be used with caution. *International Journal of Radiation Oncology, Biology, Physics*, 74(3), 884-891. *Exclude: Study size*
- Feng, M., Jabbari, S., Lin, A., Bradford, C. R., Chepeha, D. B., Teknos, T. N., . . . Eisbruch, A. (2005). Predictive factors of local-regional recurrences following parotid sparing intensity modulated or 3D conformal radiotherapy for head and neck cancer. *Radiotherapy & Oncology*, 77(1), 32-38. *Exclude: Treatment planning*
- Fenkell, L., Kaminsky, I., Breen, S., Huang, S., Van Prooijen, M., & Ringash, J. (2008). Dosimetric comparison of IMRT vs. 3D conformal radiotherapy in the treatment of cancer of the cervical esophagus. *Radiotherapy & Oncology*, 89(3), 287-291. *Exclude: Study size*
- Fenoglietto, P., Laliberte, B., Ailleres, N., Riou, O., Dubois, J. B., & Azria, D. (2011). Eight years of IMRT quality assurance with ionization chambers and film dosimetry: Experience of the montpellier comprehensive cancer center. *Radiation Oncology*, 6, 85. *Exclude: Treatment planning*
- Fenoglietto, P., Laliberte, B., Allaw, A., Ailleres, N., Idri, K., Hay, M. H., . . . Azria, D. (2008). Persistently better treatment planning results of intensity-modulated (IMRT) over conformal radiotherapy (3D-CRT) in prostate

- cancer patients with significant variation of clinical target volume and/or organs-at-risk. *Radiotherapy & Oncology*, 88(1), 77-87. *Exclude: Study size*
- Fenwick, J. D., & Pardo-Montero, J. (2011). Numbers of beam angles required for near-optimal IMRT: Theoretical limits and numerical studies. *Medical Physics*, 38(8), 4518-4530. *Exclude: Treatment planning*
- Ferreira, B. C., do Carmo Lopes, M., Mateus, J., Capela, M., & Mavroidis, P. (2010). Radiobiological evaluation of forward and inverse IMRT using different fractionations for head and neck tumours. *Radiation Oncology*, 5, 57. : *Study size*
- Feuvret, L., Noel, G., Mazeron, J. J., & Bey, P. (2006). Conformity index: A review. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 333-342. *Exclude: Treatment planning*
- Fiorino, C., Dell'Oca, I., Pierelli, A., Broggi, S., De Martin, E., Di Muzio, N., . . . Calandrino, R. (2006). Significant improvement in normal tissue sparing and target coverage for head and neck cancer by means of helical tomotherapy. *Radiotherapy & Oncology*, 78(3), 276-282. *Exclude: Study size*
- Fippel, M., Haryanto, F., Dohm, O., Nusslin, F., & Kriesen, S. (2003). A virtual photon energy fluence model for monte carlo dose calculation. *Medical Physics*, 30(3), 301-311. *Exclude: Treatment planning*
- Floyd, N. S., Woo, S. Y., Teh, B. S., Prado, C., Mai, W. Y., Trask, T., . . . Butler, E. B. (2004). Hypofractionated intensity-modulated radiotherapy for primary glioblastoma multiforme. *International Journal of Radiation Oncology, Biology, Physics*, 58(3), 721-726. *Exclude: Study size*
- Flynn, R. T., Barbee, D. L., Mackie, T. R., & Jeraj, R. (2007). Comparison of intensity modulated x-ray therapy and intensity modulated proton therapy for selective subvolume boosting: A phantom study. *Physics in Medicine & Biology*, 52(20), 6073-6091. *Exclude: Study design (phantom study)*
- Fogarty, G. B., Ng, D., Liu, G., Haydu, L. E., & Bhandari, N. (2011). Volumetric modulated arc therapy is superior to conventional intensity modulated radiotherapy--a comparison among prostate cancer patients treated in an australian centre. *Radiation Oncology*, 6, 108. *Exclude: Treatment Planning*
- Fogliata, A., Bergstrom, S., Cafaro, I., Clivio, A., Cozzi, L., Dipasquale, G., . . . Weber, D. C. (2011). Cranio-spinal irradiation with volumetric modulated arc therapy: A multi-institutional treatment experience. *Radiotherapy & Oncology*, 99(1), 79-85. *Exclude: Study size*
- Fogliata, A., Bolsi, A., & Cozzi, L. (2002). Critical appraisal of treatment techniques based on conventional photon beams, intensity modulated photon beams and proton beams for therapy of intact breast. *Radiotherapy & Oncology*, 62(2), 137-145. *Exclude: Sample size*
- Fogliata, A., Bolsi, A., & Cozzi, L. (2003). Comparative analysis of intensity modulation inverse planning modules of three commercial treatment planning systems applied to head and neck tumour model. *Radiotherapy & Oncology*, 66(1), 29-40. *Exclude: Treatment planning*
- Fogliata, A., Bolsi, A., Cozzi, L., & Bernier, J. (2003). Comparative dosimetric evaluation of the simultaneous integrated boost with photon intensity modulation in head and neck cancer patients. *Radiotherapy & Oncology*, 69(3), 267-275. *Exclude: Study size*
- Fogliata, A., Clivio, A., Nicolini, G., Vanetti, E., & Cozzi, L. (2008). Intensity modulation with photons for benign intracranial tumours: A planning comparison of volumetric single arc, helical arc and fixed gantry techniques. *Radiotherapy & Oncology*, 89(3), 254-262. *Exclude: Study size*
- Fogliata, A., Nicolini, G., Alber, M., Asell, M., Dobler, B., El-Haddad, M., . . . Cozzi, L. (2005). IMRT for breast. a planning study. *Radiotherapy & Oncology*, 76(3), 300-310. *Exclude: Study size*
- Fong, A., Bromley, R., Beat, M., Vien, D., Dineley, J., & Morgan, G. (2009). Dosimetric comparison of intensity modulated radiotherapy techniques and standard wedged tangents for whole breast radiotherapy. *Journal of Medical Imaging & Radiation Oncology*, 53(1), 92-99. *Exclude: Treatment planning*
- Fontenot, J. D., King, M. L., Johnson, S. A., Wood, C. G., Price, M. J., & Lo, K. K. (2012). Single-arc volumetric-modulated arc therapy can provide dose distributions equivalent to fixed-beam intensity-modulated

- radiation therapy for prostatic irradiation with seminal vesicle and/or lymph node involvement. *British Journal of Radiology*, 85(1011), 231-236. *Exclude: Study size*
- Fonteyne, V., De Gersem, W., De Neve, W., Jacobs, F., Lumen, N., Vandecasteele, K., . . . De Meerleer, G. (2009). Hypofractionated intensity-modulated arc therapy for lymph node metastasized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 75(4), 1013-1020. *Exclude: Study size*
- Fonteyne, V., De Neve, W., Villeirs, G., De Wagter, C., & De Meerleer, G. (2007). Late radiotherapy-induced lower intestinal toxicity (RILIT) of intensity-modulated radiotherapy for prostate cancer: The need for adapting toxicity scales and the appearance of the sigmoid colon as co-responsible organ for lower intestinal toxicity. *Radiotherapy & Oncology*, 84(2), 156-163. *Exclude: Date*
- Foote, R. L., Molina, J. R., Kasperbauer, J. L., Lloyd, R. V., Mclver, B., Morris, J. C., . . . Bible, K. C. (2011). Enhanced survival in locoregionally confined anaplastic thyroid carcinoma: A single-institution experience using aggressive multimodal therapy. *Thyroid*, 21(1), 25-30. *Exclude: Study size*
- Forstner, D., Borg, M., & Saxon, B. (2006). Orbital rhabdomyosarcoma: Multidisciplinary treatment experience. *Australasian Radiology*, 50(1), 41-45. *Exclude: Study size*
- Fotina, I., Kragl, G., Kroupa, B., Trausmuth, R., & Georg, D. (2011). Clinical comparison of dose calculation using the enhanced collapsed cone algorithm vs. a new monte carlo algorithm. *Strahlentherapie Und Onkologie*, 187(7), 433-441. *Exclude: Study size*
- Fotina, I., Winkler, P., Kunzler, T., Reiterer, J., Simmat, I., & Georg, D. (2009). Advanced kernel methods vs. monte carlo-based dose calculation for high energy photon beams. *Radiotherapy & Oncology*, 93(3), 645-653. *Exclude: Treatment planning*
- Fourkal, E., Li, J. S., Xiong, W., Nahum, A., & Ma, C. M. (2003). Intensity modulated radiation therapy using laser-accelerated protons: A monte carlo dosimetric study. *Physics in Medicine & Biology*, 48(24), 3977-4000. *Exclude: Treatment planning*
- Fox, C., Romeijn, H. E., & Dempsey, J. F. (2006). Fast voxel and polygon ray-tracing algorithms in intensity modulated radiation therapy treatment planning. *Medical Physics*, 33(5), 1364-1371. *Exclude: Treatment planning*
- Fox, C., Romeijn, H. E., Lynch, B., Men, C., Aleman, D. M., & Dempsey, J. F. (2008). Comparative analysis of 60Co intensity-modulated radiation therapy. *Physics in Medicine & Biology*, 53(12), 3175-3188. *Exclude: Treatment planning*
- Fraass, B. A. (2008). QA issues for computer-controlled treatment delivery: This is not your old R/V system any more!. *International Journal of Radiation Oncology, Biology, Physics*, 71(1 Suppl), S98-S102. *Exclude: Treatment planning*
- Francescon, P., Cora, S., & Chiovati, P. (2003). Dose verification of an IMRT treatment planning system with the BEAM EGS4-based monte carlo code. *Medical Physics*, 30(2), 144-157. *Exclude: Treatment planning*
- Francois, P., & Mazal, A. (2009). Static and rotational output variation of a tomotherapy unit. *Medical Physics*, 36(3), 816-820. *Exclude: Treatment planning*
- Frank, S. J., Kudchadker, R. J., Kuban, D. A., De Crevoisier, R., Lee, A. K., Cheung, R. M., . . . Dong, L. (2010). A volumetric trend analysis of the prostate and seminal vesicles during a course of intensity-modulated radiation therapy. *American Journal of Clinical Oncology*, 33(2), 173-175. *Exclude: Study size*
- Frazier, R. C., Vicini, F. A., Sharpe, M. B., Yan, D., Fayad, J., Baglan, K. L., . . . Wong, J. W. (2004). Impact of breathing motion on whole breast radiotherapy: A dosimetric analysis using active breathing control. *International Journal of Radiation Oncology, Biology, Physics*, 58(4), 1041-1047. *Exclude: Study size*
- Freedman, G. M., Anderson, P. R., Li, J., Eisenberg, D. F., Hanlon, A. L., Wang, L., & Nicolaou, N. (2006). Intensity modulated radiation therapy (IMRT) decreases acute skin toxicity for women receiving radiation for breast cancer. *American Journal of Clinical Oncology*, 29(1), 66-70. *Exclude: Included in systematic review (Hayes 2012 [Whole Breast])*

- Freedman, G. M., Li, T., Nicolaou, N., Chen, Y., Ma, C. C., & Anderson, P. R. (2009). Breast intensity-modulated radiation therapy reduces time spent with acute dermatitis for women of all breast sizes during radiation. *International Journal of Radiation Oncology, Biology, Physics*, 74(3), 689-694. *Exclude: Included in systematic review (Hayes 2012 [Whole Breast])*
- Fu, W. H., Wang, L. H., Zhou, Z. M., Dai, J. R., Hu, Y. M., & Zhao, L. J. (2004). Comparison of conformal and intensity-modulated techniques for simultaneous integrated boost radiotherapy of upper esophageal carcinoma. *World Journal of Gastroenterology*, 10(8), 1098-1102. *Exclude: Study size*
- Fuller, C. D., Thomas, C. R., Schwartz, S., Golden, N., Ting, J., Wong, A., . . . Scarbrough, T. J. (2006). Method comparison of ultrasound and kilovoltage x-ray fiducial marker imaging for prostate radiotherapy targeting. *Physics in Medicine & Biology*, 51(19), 4981-4993. *Exclude: Treatment planning*
- Fuss, M., Salter, B. J., Caron, J. L., Vollmer, D. G., & Herman, T. S. (2005). Intensity-modulated radiosurgery for childhood arteriovenous malformations. *Acta Neurochirurgica*, 147(11), 1141-1149. *Exclude: Study size*
- Fuss, M., Salter, B. J., Sadeghi, A., Vollmer, D. G., Hevezi, J. M., & Herman, T. S. (2002). Fractionated stereotactic intensity-modulated radiotherapy (FS-IMRT) for small acoustic neuromas. *Medical Dosimetry*, 27(2), 147-154. *Exclude: Sample size*
- Fuss, M., Shi, C., & Papanikolaou, N. (2006). Tomotherapeutic stereotactic body radiation therapy: Techniques and comparison between modalities. *Acta Oncologica*, 45(7), 953-960. *Exclude: Intervention not of interest (SBRT)*
- Gaede, S., & Wong, E. (2004). An algorithm for systematic selection of beam directions for IMRT. *Medical Physics*, 31(2), 376-388. *Exclude: Treatment planning*
- Gagne, I. M., Ansbacher, W., Zavgorodni, S., Popescu, C., & Beckham, W. A. (2008). A monte carlo evaluation of RapidArc dose calculations for oropharynx radiotherapy. *Physics in Medicine & Biology*, 53(24), 7167-7185. *Exclude: Study size*
- Galvin, J. M., Ezzell, G., Eisbrauch, A., Yu, C., Butler, B., Xiao, Y., . . . American Association of Physicists in,Medicine. (2004). Implementing IMRT in clinical practice: A joint document of the american society for therapeutic radiology and oncology and the american association of physicists in medicine. *International Journal of Radiation Oncology, Biology, Physics*, 58(5), 1616-1634.
- Gao, J., Tao, Y. L., Li, G., Yi, W., & Xia, Y. F. (2012). Involvement of difference in decrease of hemoglobin level in poor prognosis of stage I and II nasopharyngeal carcinoma: Implication in outcome of radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 82(4), 1471-1478. *Exclude: Outcome not of interest (hemoglobin levels)*
- Garden, A. S., & Chambers, M. S. (2007). Head and neck radiation and mucositis. *Current Opinion in Supportive & Palliative Care*, 1(1), 30-34. *Exclude: Study design (narrative review)*
- Garden, A. S., Morrison, W. H., Wong, P. F., Tung, S. S., Rosenthal, D. I., Dong, L., . . . Ang, K. K. (2007). Disease-control rates following intensity-modulated radiation therapy for small primary oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 67(2), 438-444. *Exclude: Date*
- Gardner, J. K., Clews, L., Gordon, J. J., Wang, S., Greer, P. B., & Siebers, J. V. (2009). Comparison of sources of exit fluence variation for IMRT. *Physics in Medicine & Biology*, 54(19), N451-8. *Exclude: Study design*
- Gauer, T., Engel, K., Kiesel, A., Albers, D., & Rades, D. (2010). Comparison of electron IMRT to helical photon IMRT and conventional photon irradiation for treatment of breast and chest wall tumours. *Radiotherapy & Oncology*, 94(3), 313-318. *Exclude: Study size*
- Gayed, I. W., Liu, H. H., Wei, X., Liao, Z., Yusuf, S. W., Chang, J. Y., . . . Komaki, R. (2009). Patterns of cardiac perfusion abnormalities after chemoradiotherapy in patients with lung cancer. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 4(2), 179-184. *Exclude: Intervention not of interest (3DCRT)*

- Gayou, O., & Miften, M. (2008). Comparison of mega-voltage cone-beam computed tomography prostate localization with online ultrasound and fiducial markers methods. *Medical Physics*, 35(2), 531-538. *Exclude: Treatment planning*
- Geets, X., Daisne, J. F., Tomsej, M., Duprez, T., Lonneux, M., & Gregoire, V. (2006). Impact of the type of imaging modality on target volumes delineation and dose distribution in pharyngo-laryngeal squamous cell carcinoma: Comparison between pre- and per-treatment studies. *Radiotherapy & Oncology*, 78(3), 291-297. *Exclude: Study size*
- Genovesi, D., Cefaro, G. A., Vinciguerra, A., Augurio, A., D'Alessandro, M., Borzillo, V., . . . Di Nicola, M. (2009). Retrospective long-term results and prognostic factors of postoperative treatment for UICC stages II and III rectal cancer. *Tumori*, 95(6), 675-682. *Exclude: Intervention not specific to IMRT (radiotherapy)*
- Georg, D., Kirisits, C., Hillbrand, M., Dimopoulos, J., & Potter, R. (2007). Preliminary results of a comparison between high-tech external beam and high-tech brachytherapy for cervix carcinoma. *Strahlentherapie Und Onkologie*, 183(Spec 2), 19-20. *Exclude: Intervention not of interest (EBT and brachytherapy)*
- Georg, D., Kirisits, C., Hillbrand, M., Dimopoulos, J., & Potter, R. (2008). Image-guided radiotherapy for cervix cancer: High-tech external beam therapy versus high-tech brachytherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1272-1278. *Exclude: Study size*
- Georg, D., Kroupa, B., Georg, P., Winkler, P., Bogner, J., Dieckmann, K., & Potter, R. (2006). Inverse planning--a comparative intersystem and interpatient constraint study. *Strahlentherapie Und Onkologie*, 182(8), 473-480. *Exclude: Treatment planning*
- Georg, D., Kroupa, B., Winkler, P., & Potter, R. (2003). Normalized sensitometric curves for the verification of hybrid IMRT treatment plans with multiple energies. *Medical Physics*, 30(6), 1142-1150. *Exclude: Treatment planning*
- Georg, P., Georg, D., Hillbrand, M., Kirisits, C., & Potter, R. (2006). Factors influencing bowel sparing in intensity modulated whole pelvic radiotherapy for gynaecological malignancies. *Radiotherapy & Oncology*, 80(1), 19-26. *Exclude: Outcome not of interest (absolute volume of rectal wall, bladder, and bowel)*
- George, R., Keall, P. J., Kini, V. R., Vedam, S. S., Siebers, J. V., Wu, Q., . . . Mohan, R. (2003). Quantifying the effect of intrafraction motion during breast IMRT planning and dose delivery. *Medical Physics*, 30(4), 552-562. *Exclude: Treatment planning*
- Gerard, K., Grandhaye, J. P., Marchesi, V., Kafrouni, H., Husson, F., & Aletti, P. (2009). A comprehensive analysis of the IMRT dose delivery process using statistical process control (SPC). *Medical Physics*, 36(4), 1275-1285. *Exclude: Treatment planning*
- Gerszten, K., Colonello, K., Heron, D. E., Lalonde, R. J., Fitian, I. D., Comerci, J. T., . . . Varlotta, J. M. (2006). Feasibility of concurrent cisplatin and extended field radiation therapy (EFRT) using intensity-modulated radiotherapy (IMRT) for carcinoma of the cervix. *Gynecologic Oncology*, 102(2), 182-188. *Exclude: Study size (harms)*
- Gerszten, P. C., Monaco, E. A., 3rd, Quader, M., Novotny, J., Jr, Kim, J. O., Flickinger, J. C., & Huq, M. S. (2010). Setup accuracy of spine radiosurgery using cone beam computed tomography image guidance in patients with spinal implants. *Journal of Neurosurgery Spine*, 12(4), 413-420. *Exclude: Treatment planning*
- Geurts, M., Gonzalez, J., & Serrano-Ojeda, P. (2009). Longitudinal study using a diode phantom for helical tomotherapy IMRT QA. *Medical Physics*, 36(11), 4977-4983. *Exclude: Treatment planning*
- Ghadjar, P., Vock, J., Vetterli, D., Manser, P., Bigler, R., Tille, J., . . . Aebersold, D. M. (2008). Acute and late toxicity in prostate cancer patients treated by dose escalated intensity modulated radiation therapy and organ tracking. *Radiation Oncology*, 3, 35. *Exclude: Date*
- Ghilezan, M., Yan, D., Liang, J., Jaffray, D., Wong, J., & Martinez, A. (2004). Online image-guided intensity-modulated radiotherapy for prostate cancer: How much improvement can we expect? A theoretical assessment of clinical benefits and potential dose escalation by improving precision and accuracy of radiation

- delivery. *International Journal of Radiation Oncology, Biology, Physics*, 60(5), 1602-1610. *Exclude: Treatment planning*
- Gibbons, J. P., Jr. (2002). Linear accelerators used for IMRT should be designed as small field, high intensity, intermediate energy units. against the proposition. *Medical Physics*, 29(11), 2527-2528. *Exclude: Study design (editorial)*
- Gielda, B. T., Millunchick, C. H., Smart, J. P., Marsh, J. C., Turian, J. V., & Coleman, J. L. (2010). Helical tomotherapy and larynx sparing in advanced oropharyngeal carcinoma: A dosimetric study. *Medical Dosimetry*, 35(3), 214-219. *Exclude: Study size*
- Gielda, B. T., Shah, A. P., Marsh, J. C., Smart, J. P., Bernard, D., Rotmensch, J., & Griem, K. L. (2011). Helical tomotherapy delivery of an IMRT boost in lieu of interstitial brachytherapy in the setting of gynecologic malignancy: Feasibility and dosimetric comparison. *Medical Dosimetry*, 36(2), 206-212. *Exclude: Study size*
- Gierga, D. P., Chen, G. T., Kung, J. H., Betke, M., Lombardi, J., & Willett, C. G. (2004). Quantification of respiration-induced abdominal tumor motion and its impact on IMRT dose distributions. *International Journal of Radiation Oncology, Biology, Physics*, 58(5), 1584-1595. *Exclude: Study size*
- Gilroy, J. S., Amdur, R. J., Louis, D. A., Li, J. G., & Mendenhall, W. M. (2004). Irradiating the groin nodes without breaking a leg: A comparison of techniques for groin node irradiation. *Medical Dosimetry*, 29(4), 258-264. *Exclude: Comparators not of interest (photon thunderbird, electron thunderbird, photon through-and-through)*
- Girinsky, T., Pichenot, C., Beaudre, A., Ghalibafian, M., & Lefkopoulos, D. (2006). Is intensity-modulated radiotherapy better than conventional radiation treatment and three-dimensional conformal radiotherapy for mediastinal masses in patients with hodgkin's disease, and is there a role for beam orientation optimization and dose constraints assigned to virtual volumes?. *International Journal of Radiation Oncology, Biology, Physics*, 64(1), 218-226. *Exclude: Treatment planning*
- Givens, D. J., Karnell, L. H., Gupta, A. K., Clamon, G. H., Pagedar, N. A., Chang, K. E., . . . Funk, G. F. (2009). Adverse events associated with concurrent chemoradiation therapy in patients with head and neck cancer. *Archives of Otolaryngology -- Head & Neck Surgery*, 135(12), 1209-1217. *Exclude: Included in De Neve (2012)*
- Gladwish, A., Kron, T., McNiven, A., Bauman, G., & Van Dyk, J. (2004). Asymmetric fan beams (AFB) for improvement of the craniocaudal dose distribution in helical tomotherapy delivery. *Medical Physics*, 31(9), 2443-2448. *Exclude: Treatment planning*
- Gluck, I., Ibrahim, M., Popovtzer, A., Teknos, T. N., Chepeha, D. B., Prince, M. E., . . . Eisbruch, A. (2009). Skin cancer of the head and neck with perineural invasion: Defining the clinical target volumes based on the pattern of failure. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 38-46. *Exclude: Study size*
- Goddu, S. M., Chaudhari, S., Mamalui-Hunter, M., Pechenaya, O. L., Pratt, D., Mutic, S., . . . Low, D. A. (2009). Helical tomotherapy planning for left-sided breast cancer patients with positive lymph nodes: Comparison to conventional multiport breast technique. *International Journal of Radiation Oncology, Biology, Physics*, 73(4), 1243-1251. *Exclude: Study size*
- Goldner, G., Slijvic, S., Oismueller, R., Salinger, J., Mittermuller, M., Langsenlehner, T., . . . Nechvile, E. (2011). Prostate cancer radiotherapy in austria: Overview on number of patients, intention to treat, and treatment techniques based on data from 2007. *Strahlentherapie Und Onkologie*, 187(5), 279-283. *Exclude: Intervention not of interest (3DCRT)*
- Gomez, D., & Komaki, R. (2010). Technical advances of radiation therapy for thymic malignancies. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 5(10 Suppl 4), S336-43. *Exclude: Study design (narrative review)*

- Gomez, D. R., Hoppe, B. S., Wolden, S. L., Zhung, J. E., Patel, S. G., Kraus, D. H., . . . Lee, N. Y. (2008). Outcomes and prognostic variables in adenoid cystic carcinoma of the head and neck: A recent experience. *International Journal of Radiation Oncology, Biology, Physics*, 70(5), 1365-1372. *Exclude: Date*
- Gomez, D. R., Zhung, J. E., Gomez, J., Chan, K., Wu, A. J., Wolden, S. L., . . . Lee, N. Y. (2009). Intensity-modulated radiotherapy in postoperative treatment of oral cavity cancers. *International Journal of Radiation Oncology, Biology, Physics*, 73(4), 1096-1103. *Exclude: Date*
- Gong, Y., Wang, J., Bai, S., Jiang, X., & Xu, F. (2008). Conventionally-fractionated image-guided intensity modulated radiotherapy (IG-IMRT): A safe and effective treatment for cancer spinal metastasis. *Radiation Oncology*, 3, 11. *Exclude: Study size*
- Gong, Y., Wang, S., Zhou, L., Liu, Y., Xu, Y., Lu, Y., . . . Jiang, Q. (2010). Dosimetric comparison using different multileaf collimators in intensity-modulated radiotherapy for upper thoracic esophageal cancer. *Radiation Oncology*, 5, 65. *Exclude: Study size*
- Gonzalez, V. J., Buchholz, D. J., Langen, K. M., Olivera, G. H., Chauhan, B., Meeks, S. L., . . . Kupelian, P. A. (2006). Evaluation of two tomotherapy-based techniques for the delivery of whole-breast intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 65(1), 284-290. *Exclude: Study size*
- Gordon, J. J., & Siebers, J. V. (2008). Evaluation of dosimetric margins in prostate IMRT treatment plans. *Medical Physics*, 35(2), 569-575. *Exclude: Treatment planning*
- Gottlieb, K. L., Hansen, C. R., Hansen, O., Westberg, J., & Brink, C. (2010). Investigation of respiration induced intra- and inter-fractional tumour motion using a standard cone beam CT. *Acta Oncologica*, 49(7), 1192-1198. *Exclude: Intervention not of interest (cone beam CT)*
- Goyal, S., Cohler, A., Camporeale, J., Narra, V., & Yue, N. J. (2008). Intensity-modulated radiation therapy for orbital lymphoma. *Radiation Medicine*, 26(10), 573-581. *Exclude: Study size*
- Goyal, S., Osusky, K., Gabel, M., Yue, N. J., & Narra, V. (2010). A novel method of island blocking in whole abdominal radiotherapy using a modified electronic tissue compensation technique. *Medical Dosimetry*, 35(3), 220-225. *Exclude: Study size*
- Goyal, S., Yue, N. J., Millevoi, R., Kagan, E., Haffty, B., & Narra, V. (2008). Improvement in dose homogeneity with electronic tissue compensation over IMRT and conventional RT in whole brain radiotherapy. *Radiotherapy & Oncology*, 88(2), 196-201. *Exclude: Study size*
- Graham, P., & Fourquet, A. (2006). Placing the boost in breast-conservation radiotherapy: A review of the role, indications and techniques for breast-boost radiotherapy. *Clinical Oncology (Royal College of Radiologists)*, 18(3), 210-219. *Exclude: Date*
- Greco, C., & Wolden, S. (2007). Current status of radiotherapy with proton and light ion beams. *Cancer*, 109(7), 1227-1238. *Exclude: Study design (narrative review)*
- Greco, C., Zelefsky, M. J., Lovelock, M., Fuks, Z., Hunt, M., Rosenzweig, K., . . . Yamada, Y. (2011). Predictors of local control after single-dose stereotactic image-guided intensity-modulated radiotherapy for extracranial metastases. *International Journal of Radiation Oncology, Biology, Physics*, 79(4), 1151-1157. *Exclude: Intervention not specific to IMRT*
- Greer, P. B., & Popescu, C. C. (2003). Dosimetric properties of an amorphous silicon electronic portal imaging device for verification of dynamic intensity modulated radiation therapy. *Medical Physics*, 30(7), 1618-1627. *Exclude: Treatment planning*
- Gregoire, V., Eisbruch, A., Hamoir, M., & Levendag, P. (2006). Proposal for the delineation of the nodal CTV in the node-positive and the post-operative neck. *Radiotherapy & Oncology*, 79(1), 15-20. *Exclude: Treatment planning*

- Griessbach, I., Lapp, M., Bohsung, J., Gademann, G., & Harder, D. (2005). Dosimetric characteristics of a new unshielded silicon diode and its application in clinical photon and electron beams. *Medical Physics*, 32(12), 3750-3754. *Exclude: Treatment planning*
- Griffin, A. M., Euler, C. I., Sharpe, M. B., Ferguson, P. C., Wunder, J. S., Bell, R. S., . . . O'Sullivan, B. (2007). Radiation planning comparison for superficial tissue avoidance in radiotherapy for soft tissue sarcoma of the lower extremity. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 847-856. *Exclude: Treatment planning*
- Grills, I. S., Yan, D., Martinez, A. A., Vicini, F. A., Wong, J. W., & Kestin, L. L. (2003). Potential for reduced toxicity and dose escalation in the treatment of inoperable non-small-cell lung cancer: A comparison of intensity-modulated radiation therapy (IMRT), 3D conformal radiation, and elective nodal irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 57(3), 875-890. *Exclude: Sample size*
- Grosu, A. L., Piert, M., Weber, W. A., Jeremic, B., Picchio, M., Schratzenstaller, U., . . . Molls, M. (2005). Positron emission tomography for radiation treatment planning. *Strahlentherapie Und Onkologie*, 181(8), 483-499. *Exclude: Treatment planning*
- Guckenberger, M., Baier, K., Richter, A., Vordermark, D., & Flentje, M. (2008). Does intensity modulated radiation therapy (IMRT) prevent additional toxicity of treating the pelvic lymph nodes compared to treatment of the prostate only?. *Radiation Oncology*, 3, 3. *Exclude: Study size*
- Guckenberger, M., Goebel, J., Wilbert, J., Baier, K., Richter, A., Sweeney, R. A., . . . Flentje, M. (2009). Clinical outcome of dose-escalated image-guided radiotherapy for spinal metastases. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 828-835. *Exclude: Study size*
- Guckenberger, M., Meyer, J., Baier, K., Vordermark, D., & Flentje, M. (2006). Distinct effects of rectum delineation methods in 3D-conformal vs. IMRT treatment planning of prostate cancer. *Radiation Oncology*, 1, 34. *Exclude: Study size*
- Guckenberger, M., Meyer, J., Wilbert, J., Baier, K., Bratengeier, K., Vordermark, D., & Flentje, M. (2007). Precision required for dose-escalated treatment of spinal metastases and implications for image-guided radiation therapy (IGRT). *Radiotherapy & Oncology*, 84(1), 56-63. *Exclude: Study size*
- Guckenberger, M., Pohl, F., Baier, K., Meyer, J., Koelbl, O., Flentje, M., & Vordermark, D. (2006). Influence of rectum delineation (rectal volume vs. rectal wall) on IMRT treatment planning of the prostate. *Strahlentherapie Und Onkologie*, 182(12), 721-726. *Exclude: Study size*
- Guckenberger, M., Pohl, F., Baier, K., Meyer, J., Vordermark, D., & Flentje, M. (2006). Adverse effect of a distended rectum in intensity-modulated radiotherapy (IMRT) treatment planning of prostate cancer. *Radiotherapy & Oncology*, 79(1), 59-64. *Exclude: Study size*
- Guckenberger, M., Richter, A., Krieger, T., Wilbert, J., Baier, K., & Flentje, M. (2009). Is a single arc sufficient in volumetric-modulated arc therapy (VMAT) for complex-shaped target volumes?. *Radiotherapy & Oncology*, 93(2), 259-265. *Exclude: Treatment planning*
- Guerrero Urbano, M. T., Clark, C. H., Kong, C., Miles, E., Dearnaley, D. P., Harrington, K. J., . . . PARSPORT Trial Management, G. (2007). Target volume definition for head and neck intensity modulated radiotherapy: Pre-clinical evaluation of PARSPORT trial guidelines. *Clinical Oncology (Royal College of Radiologists)*, 19(8), 604-613. *Exclude: Study size*
- Guerrero Urbano, M. T., Henrys, A. J., Adams, E. J., Norman, A. R., Bedford, J. L., Harrington, K. J., . . . Tait, D. M. (2006). Intensity-modulated radiotherapy in patients with locally advanced rectal cancer reduces volume of bowel treated to high dose levels. *International Journal of Radiation Oncology, Biology, Physics*, 65(3), 907-916. *Exclude: study size*
- Gupta, T., Jain, S., Agarwal, J. P., Ghosh-Laskar, S., Phurailatpam, R., Pai-Shetty, R., & Dinshaw, K. A. (2011). Prospective assessment of patterns of failure after high-precision definitive (chemo)radiation in head-and-



- neck squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 80(2), 522-531. Exclude: Outcomes not specific to IMRT
- Gupta, T., Wadasadawala, T., Master, Z., Phurailatpam, R., Pai-Shetty, R., & Jalali, R. (2012). Encouraging early clinical outcomes with helical tomotherapy-based image-guided intensity-modulated radiation therapy for residual, recurrent, and/or progressive benign/low-grade intracranial tumors: A comprehensive evaluation. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), 756-764. Exclude: Outcomes not of interest
- Gupta, V., Krug, L. M., Laser, B., Hudka, K., Flores, R., Rusch, V. W., & Rosenzweig, K. E. (2009). Patterns of local and nodal failure in malignant pleural mesothelioma after extrapleural pneumonectomy and photon-electron radiotherapy. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 4(6), 746-750. Exclude: Intervention not of interest (extrapleural pneumonectomy and photon-electron radiotherapy)
- Gursel, B., Meydan, D., Ozbek, N., & Ofluoglu, T. (2011). Dosimetric comparison of three different external beam whole breast irradiation techniques. *Advances in Therapy*, 28(12), 1114-1125. Exclude: Treatment planning
- Gustavsson, H., Karlsson, A., Back, S. A., Olsson, L. E., Haraldsson, P., Engstrom, P., & Nystrom, H. (2003). MAGIC-type polymer gel for three-dimensional dosimetry: Intensity-modulated radiation therapy verification. *Medical Physics*, 30(6), 1264-1271. Exclude: Treatment planning
- Habl, G., Jensen, A. D., Potthoff, K., Uhl, M., Hof, H., Hajda, J., . . . Munter, M. W. (2010). Treatment of locally advanced carcinomas of head and neck with intensity-modulated radiation therapy (IMRT) in combination with cetuximab and chemotherapy: The REACH protocol. *BMC Cancer*, 10, 651. Exclude: Study design (narrative about ongoing clinical trial)
- Hacker, F. (2003). Compared with inverse-planning, forward planning is preferred for IMRT stereotactic radiosurgery. for the proposition. *Medical Physics*, 30(5), 731-732. Exclude: Study design (commentary)
- Hall, E. J., & Wu, C. S. (2003). Radiation-induced second cancers: The impact of 3D-CRT and IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 83-88. Exclude: Study design (narrative review)
- Hammoud, R., Patel, S. H., Pradhan, D., Kim, J., Guan, H., Li, S., & Movsas, B. (2008). Examining margin reduction and its impact on dose distribution for prostate cancer patients undergoing daily cone-beam computed tomography. *International Journal of Radiation Oncology, Biology, Physics*, 71(1), 265-273. Exclude: Study size
- Han, C., Chen, Y. J., Liu, A., Schultheiss, T. E., & Wong, J. Y. (2007). Dosimetric study and in-vivo dose verification for conformal avoidance treatment of anal adenocarcinoma using helical tomotherapy. *Medical Dosimetry*, 32(1), 33-37. Exclude: Study size
- Han, C., Chen, Y. J., Liu, A., Schultheiss, T. E., & Wong, J. Y. (2008). Actual dose variation of parotid glands and spinal cord for nasopharyngeal cancer patients during radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1256-1262. Exclude: Study size
- Han, C., Liu, A., Schultheiss, T. E., Pezner, R. D., Chen, Y. J., & Wong, J. Y. (2006). Dosimetric comparisons of helical tomotherapy treatment plans and step-and-shoot intensity-modulated radiosurgery treatment plans in intracranial stereotactic radiosurgery. *International Journal of Radiation Oncology, Biology, Physics*, 65(2), 608-616. Exclude: Study size
- Hansen, E. K., Bucci, M. K., Quivey, J. M., Weinberg, V., & Xia, P. (2006). Repeat CT imaging and replanning during the course of IMRT for head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 355-362. Exclude: Study size
- Haraldsson, P., Knoos, T., Nystrom, H., & Engstrom, P. (2003). Monte carlo study of TLD measurements in air cavities. *Physics in Medicine & Biology*, 48(18), N253-9. Exclude: Treatment planning
- Hardcastle, N., Cutajar, D. L., Metcalfe, P. E., Lerch, M. L., Perevertaylo, V. L., Tome, W. A., & Rosenfeld, A. B. (2010). In vivo real-time rectal wall dosimetry for prostate radiotherapy. *Physics in Medicine & Biology*, 55(13), 3859-3871. Exclude: Treatment planning

- Hardcastle, N., Metcalfe, P. E., Rosenfeld, A. B., & Tome, W. A. (2009). Endo-rectal balloon cavity dosimetry in a phantom: Performance under IMRT and helical tomotherapy beams. *Radiotherapy & Oncology*, *92*(1), 48-56. *Exclude: Treatment planning*
- Hardcastle, N., Tome, W. A., Foo, K., Miller, A., Carolan, M., & Metcalfe, P. (2011). Comparison of prostate IMRT and VMAT biologically optimised treatment plans. *Medical Dosimetry*, *36*(3), 292-298. *Exclude: Study size*
- Hardee, M. E., Raza, S., Becker, S. J., Jozsef, G., Lymberis, S. C., Hochman, T., . . . Formenti, S. C. (2012). Prone hypofractionated whole-breast radiotherapy without a boost to the tumor bed: Comparable toxicity of IMRT versus a 3D conformal technique. *International Journal of Radiation Oncology, Biology, Physics*, *82*(3), e415-23. *Exclude: Included in Hayes (2012b)*
- Haripoteponkul, N. H., Nath, S. K., Scanderbeg, D., Saenz, C., & Yashar, C. M. (2011). Evaluation of intra- and inter-fraction movement of the cervix during intensity modulated radiation therapy. *Radiotherapy & Oncology*, *98*(3), 347-351. *Exclude: Study size*
- Harmon, J., Van Ufflen, D., & Larue, S. (2009). Assessment of a radiotherapy patient cranial immobilization device using daily on-board kilovoltage imaging. *Veterinary Radiology & Ultrasound*, *50*(2), 230-234. *Exclude: Treatment planning*
- Harris, E. E., Latifi, K., Rusthoven, C., Javedan, K., & Forster, K. (2011). Assessment of organ motion in postoperative endometrial and cervical cancer patients treated with intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, *81*(4), e645-50. *Exclude: Treatment planning*
- Harsolia, A., Kestin, L., Grills, I., Wallace, M., Jolly, S., Jones, C., . . . Vicini, F. A. (2007). Intensity-modulated radiotherapy results in significant decrease in clinical toxicities compared with conventional wedge-based breast radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, *68*(5), 1375-1380. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Hartford, A. C., Palisca, M. G., Eichler, T. J., Beyer, D. C., Devineni, V. R., Ibbott, G. S., . . . American College of, R. (2009). American society for therapeutic radiology and oncology (ASTRO) and american college of radiology (ACR) practice guidelines for intensity-modulated radiation therapy (IMRT). *International Journal of Radiation Oncology, Biology, Physics*, *73*(1), 9-14. *Exclude: Study design (guideline)*
- Hartmann, M., & Bogner, L. (2008). Investigation of intensity-modulated radiotherapy optimization with gEUD-based objectives by means of simulated annealing. *Medical Physics*, *35*(5), 2041-2049. *Exclude: Treatment planning*
- Hasegawa, Y., Iuchi, T., Osato, K., Kodama, T., Toyama, N., & Hatano, K. (2011). Comparison of intensity modulated radiotherapy and dynamic three-dimensional conformal radiotherapy with regard to dose distribution and sparing of organs at risk. *Neurologia Medico-Chirurgica*, *51*(5), 349-355. *Exclude: Study size*
- Hashizume, C., Mori, Y., Kobayashi, T., Shibamoto, Y., Nagai, A., & Hayashi, N. (2010). Stereotactic radiotherapy using novalis for craniopharyngioma adjacent to optic pathways. *Journal of Neuro-Oncology*, *98*(2), 239-247. *Exclude: Study size*
- Haslam, J. J., Bonta, D. V., Lujan, A. E., Rash, C., Jackson, W., & Roeske, J. C. (2003). Comparison of dose calculated by an intensity modulated radiotherapy treatment planning system and an independent monitor unit verification program. *Journal of Applied Clinical Medical Physics*, *4*(3), 224-230. *Exclude: Treatment planning*
- Haustermans, K., Roels, S., Verstraete, J., Depuydt, T., & Slagmolen, P. (2007). Adaptive RT in rectal cancer: Superior to 3D-CRT? A simple question, a complex answer. *Strahlentherapie Und Onkologie*, *183*(Spec 2), 21-23. *Exclude: Study design (no data reported)*
- Hawkins, M. A., Bedford, J. L., Warrington, A. P., & Tait, D. M. (2012). Volumetric modulated arc therapy planning for distal oesophageal malignancies. *British Journal of Radiology*, *85*(1009), 44-52. *Exclude: Study size*
- Hayden, A. J., Martin, J. M., Kneebone, A. B., Lehman, M., Wiltshire, K. L., Skala, M., . . . Australian & New Zealand Faculty of Radiation Oncology Genito-Urinary,Group. (2010). Australian & new zealand faculty of radiation

- oncology genito-urinary group: 2010 consensus guidelines for definitive external beam radiotherapy for prostate carcinoma. *Journal of Medical Imaging & Radiation Oncology*, 54(6), 513-525.
- Hayes, J. H., Ollendorf, D. A., Pearson, S. D., Barry, M. J., Kantoff, P. W., Stewart, S. T., . . . McMahon, P. M. (2010). Active surveillance compared with initial treatment for men with low-risk prostate cancer: A decision analysis. *JAMA*, 304(21), 2373-2380. *Exclude: Study design (decision analysis model)*
- Healy, B., Frantzis, J., Murry, R., Martin, J., Middleton, M., Catton, C., & Kron, T. (2011). Development of a dosimetry inter-comparison for IMRT as part of site credentialing for a TROG multi-centre clinical trial for prostate cancer. *Australasian Physical & Engineering Sciences in Medicine*, 34(2), 195-202. *Exclude: Study design (dosimetry inter-comparison for site credentialing)*
- Heath, E., & Seuntjens, J. (2003). Development and validation of a BEAMnrc component module for accurate monte carlo modelling of the varian dynamic millennium multileaf collimator. *Physics in Medicine & Biology*, 48(24), 4045-4063. *Exclude: Treatment planning*
- Heath, E., Seuntjens, J., & Sheikh-Bagheri, D. (2004). Dosimetric evaluation of the clinical implementation of the first commercial IMRT monte carlo treatment planning system at 6 MV. *Medical Physics*, 31(10), 2771-2779. *Exclude: Treatment planning*
- Hein, P. A., Gladstone, D. J., Bellerive, M. R., & Hug, E. B. (2005). Importance of protocol target definition on the ability to spare normal tissue: An IMRT and 3D-CRT planning comparison for intraorbital tumors. *International Journal of Radiation Oncology, Biology, Physics*, 62(5), 1540-1548. *Exclude: Treatment planning*
- Heinzelmann, F., Thorwarth, D., Lamprecht, U., Kaulich, T. W., Fuchs, J., Seitz, G., . . . Weinmann, M. (2011). Comparison of different adjuvant radiotherapy approaches in childhood bladder/prostate rhabdomyosarcoma treated with conservative surgery. *Strahlentherapie Und Onkologie*, 187(11), 715-721. *Exclude: Study size*
- Hermans, R. (2006). Head and neck cancer: How imaging predicts treatment outcome. *Cancer Imaging*, 6, S145-53. *Exclude: Treatment planning*
- Hermanto, U., Frijia, E. K., Lii, M. J., Chang, E. L., Mahajan, A., & Woo, S. Y. (2007). Intensity-modulated radiotherapy (IMRT) and conventional three-dimensional conformal radiotherapy for high-grade gliomas: Does IMRT increase the integral dose to normal brain?. *International Journal of Radiation Oncology, Biology, Physics*, 67(4), 1135-1144. *Exclude: Treatment planning*
- Hermesse, J., Biver, S., Jansen, N., Lenaerts, E., De Patoul, N., Vynckier, S., . . . Nickers, P. (2009). A dosimetric selectivity intercomparison of HDR brachytherapy, IMRT and helical tomotherapy in prostate cancer radiotherapy. *Strahlentherapie Und Onkologie*, 185(11), 736-742. *Exclude: Study size*
- Hermesse, J., Biver, S., Jansen, N., Lenaerts, E., & Nickers, P. (2010). Dosimetric comparison of high-dose-rate brachytherapy and intensity-modulated radiation therapy as a boost to the prostate. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 269-276. *Exclude: Study size*
- Heron, D. E., Andrade, R. S., Beriwal, S., & Smith, R. P. (2008). PET-CT in radiation oncology: The impact on diagnosis, treatment planning, and assessment of treatment response. *American Journal of Clinical Oncology*, 31(4), 352-362. *Exclude: Treatment planning*
- Heron, D. E., Andrade, R. S., Flickinger, J., Johnson, J., Agarwala, S. S., Wu, A., . . . Avril, N. (2004). Hybrid PET-CT simulation for radiation treatment planning in head-and-neck cancers: A brief technical report. *International Journal of Radiation Oncology, Biology, Physics*, 60(5), 1419-1424. *Exclude: Date*
- Heron, D. E., Gerszten, K., Selvaraj, R. N., King, G. C., Sonnik, D., Gallion, H., . . . Kalnicki, S. (2003). Conventional 3D conformal versus intensity-modulated radiotherapy for the adjuvant treatment of gynecologic malignancies: A comparative dosimetric study of dose-volume histograms small star, filled. *Gynecologic Oncology*, 91(1), 39-45. *Exclude: Sample size*

- Herrick, J. S., Neill, C. J., & Rosser, P. F. (2008). A comprehensive clinical 3-dimensional dosimetric analysis of forward planned IMRT and conventional wedge planned techniques for intact breast radiotherapy. *Medical Dosimetry*, 33(1), 62-70. *Exclude: Treatment planning*
- Hey, J., Setz, J., Gerlach, R., Janich, M., Hildebrandt, G., Vordermark, D., . . . Kuhnt, T. (2011). Parotid gland-recovery after radiotherapy in the head and neck region--36 months follow-up of a prospective clinical study. *Radiation Oncology*, 6, 125. *Exclude: Outcomes not specific to IMRT*
- Hey, J., Setz, J., Gerlach, R., Vordermark, D., Gernhardt, C. R., & Kuhnt, T. (2009). Effect of cisplatin on parotid gland function in concomitant radiochemotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1475-1480. *Exclude: Treatment planning (dose-related)*
- Higgins, P. D., Alaei, P., Gerbi, B. J., & Dusenbery, K. E. (2003). In vivo diode dosimetry for routine quality assurance in IMRT. *Medical Physics*, 30(12), 3118-3123. *Exclude: Treatment planning*
- Hillbrand, M., Georg, D., Gadner, H., Potter, R., & Dieckmann, K. (2008). Abdominal cancer during early childhood: A dosimetric comparison of proton beams to standard and advanced photon radiotherapy. *Radiotherapy & Oncology*, 89(2), 141-149. *Exclude: Study size*
- Hill-Kayser, C. E., Avery, S., Mesina, C. F., James, P., Friedberg, J. S., Cengel, K., . . . Rengan, R. (2009). Hemithoracic radiotherapy after extrapleural pneumonectomy for malignant pleural mesothelioma: A dosimetric comparison of two well-described techniques. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 4(11), 1431-1437. *Exclude: Study size*
- Hinerman, R. W., Amdur, R. J., Morris, C. G., Kirwan, J., & Mendenhall, W. M. (2008). Definitive radiotherapy in the management of paragangliomas arising in the head and neck: A 35-year experience. *Head & Neck*, 30(11), 1431-1438. *Exclude: Outcomes not specific to IMRT*
- Hitchcock, Y. J., Tward, J. D., Szabo, A., Bentz, B. G., & Shrieve, D. C. (2009). Relative contributions of radiation and cisplatin-based chemotherapy to sensorineural hearing loss in head-and-neck cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 73(3), 779-788. *Exclude: Treatment planning*
- Ho, K. F., Marchant, T., Moore, C., Webster, G., Rowbottom, C., Penington, H., . . . Slevin, N. (2012). Monitoring dosimetric impact of weight loss with kilovoltage (kV) cone beam CT (CBCT) during parotid-sparing IMRT and concurrent chemotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), e375-82. *Exclude: Study size*
- Hodge, C. W., Bentzen, S. M., Wong, G., Palazzi-Churas, K. L., Wiederholt, P. A., Gondi, V., . . . Harari, P. M. (2007). Are we influencing outcome in oropharynx cancer with intensity-modulated radiotherapy? an inter-era comparison. *International Journal of Radiation Oncology, Biology, Physics*, 69(4), 1032-1041. *Exclude: Date*
- Hodges, J. C., Das, P., Eng, C., Reish, A. G., Beddar, A. S., Delclos, M. E., . . . Crane, C. H. (2009). Intensity-modulated radiation therapy for the treatment of squamous cell anal cancer with para-aortic nodal involvement. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 791-794. *Exclude: Study size*
- Holt, A., van Vliet-Vroegindeweij, C., Mans, A., Belderbos, J. S., & Damen, E. M. (2011). Volumetric-modulated arc therapy for stereotactic body radiotherapy of lung tumors: A comparison with intensity-modulated radiotherapy techniques. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1560-1567. *Exclude: Treatment planning*
- Hong Jiang, W., Ping Zhao, S., Hai Xie, Z., Zhang, H., Zhang, J., & Yun Xiao, J. (2009). Endoscopic resection of chordomas in different clival regions. *Acta Oto-Laryngologica*, 129(1), 71-83. *Exclude: Study size*
- Hong, J. Y., Kim, G. W., Kim, C. U., Cheon, G. S., Son, S. H., Lee, J. Y., . . . Yoon, S. C. (2011). Supine linac treatment versus tomotherapy in craniospinal irradiation: Planning comparison and dosimetric evaluation. *Radiation Protection Dosimetry*, 146(1-3), 364-366. *Exclude: Study size*

- Hong, L., Alektiar, K. M., Hunt, M., Venkatraman, E., & Leibel, S. A. (2004). Intensity-modulated radiotherapy for soft tissue sarcoma of the thigh. *International Journal of Radiation Oncology, Biology, Physics*, 59(3), 752-759. *Exclude: Study size*
- Hong, T. S., Tome, W. A., Chappell, R. J., Chinnaiyan, P., Mehta, M. P., & Harari, P. M. (2005). The impact of daily setup variations on head-and-neck intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 61(3), 779-788. *Exclude: Study size*
- Hong, T. S., Tome, W. A., Jaradat, H., Raisbeck, B. M., & Ritter, M. A. (2006). Pelvic nodal dose escalation with prostate hypofractionation using conformal avoidance defined (H-CAD) intensity modulated radiation therapy. *Acta Oncologica*, 45(6), 717-727. *Exclude: Study size*
- Hoppe, B. S., Laser, B., Kowalski, A. V., Fontenla, S. C., Pena-Greenberg, E., Yorke, E. D., . . . Rosenzweig, K. E. (2008). Acute skin toxicity following stereotactic body radiation therapy for stage I non-small-cell lung cancer: Who's at risk?. *International Journal of Radiation Oncology, Biology, Physics*, 72(5), 1283-1286. : *Intervention not of interest (SBRT)*
- Hoppe, B. S., Stegman, L. D., Zelefsky, M. J., Rosenzweig, K. E., Wolden, S. L., Patel, S. G., . . . Lee, N. Y. (2007). Treatment of nasal cavity and paranasal sinus cancer with modern radiotherapy techniques in the postoperative setting--the MSKCC experience. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 691-702. *Exclude: Date*
- Hoppe, B. S., Wolden, S. L., Zelefsky, M. J., Mechalakos, J. G., Shah, J. P., Kraus, D. H., & Lee, N. (2008). Postoperative intensity-modulated radiation therapy for cancers of the paranasal sinuses, nasal cavity, and lacrimal glands: Technique, early outcomes, and toxicity. *Head & Neck*, 30(7), 925-932. *Exclude: Date*
- Horton, J. K., Halle, J. S., Chang, S. X., & Sartor, C. I. (2006). Comparison of three concomitant boost techniques for early-stage breast cancer. *International Journal of Radiation Oncology, Biology, Physics*, 64(1), 168-175. *Exclude: Treatment planning*
- Hou, Q., Wang, J., Chen, Y., & Galvin, J. M. (2003). Beam orientation optimization for IMRT by a hybrid method of the genetic algorithm and the simulated dynamics. *Medical Physics*, 30(9), 2360-2367. *Exclude: Treatment planning*
- Hou, Q., Wang, J., Chen, Y., & Galvin, J. M. (2003). An optimization algorithm for intensity modulated radiotherapy--the simulated dynamics with dose-volume constraints. *Medical Physics*, 30(1), 61-68. *Exclude: Treatment planning*
- Houghton, F., Benson, R. J., Tudor, G. S., Fairfoul, J., Gemmill, J., Dean, J. C., . . . Burnet, N. G. (2009). An assessment of action levels in imaging strategies in head and neck cancer using TomoTherapy. are our margins adequate in the absence of image guidance?. *Clinical Oncology (Royal College of Radiologists)*, 21(9), 720-727. *Exclude: Study size*
- Houweling, A. C., Philippens, M. E., Dijkema, T., Roesink, J. M., Terhaard, C. H., Schilstra, C., . . . Raaijmakers, C. P. (2010). A comparison of dose-response models for the parotid gland in a large group of head-and-neck cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 76(4), 1259-1265. *Exclude: Treatment planning*
- Houweling, A. C., van der Meer, S., van der Wal, E., Terhaard, C. H., & Raaijmakers, C. P. (2010). Improved immobilization using an individual head support in head and neck cancer patients. *Radiotherapy & Oncology*, 96(1), 100-103. *Exclude: Treatment planning*
- Howell, R. M., Ferenci, M. S., Hertel, N. E., & Fullerton, G. D. (2005). Investigation of secondary neutron dose for 18 MV dynamic MLC IMRT delivery. *Medical Physics*, 32(3), 786-793. *Exclude: Treatment planning*
- Howell, R. M., Hertel, N. E., Wang, Z., Hutchinson, J., & Fullerton, G. D. (2006). Calculation of effective dose from measurements of secondary neutron spectra and scattered photon dose from dynamic MLC IMRT for 6 MV, 15 MV, and 18 MV beam energies. *Medical Physics*, 33(2), 360-368. *Exclude: Treatment planning*

- Hsiao, K. Y., Yeh, S. A., Chang, C. C., Tsai, P. C., Wu, J. M., & Gau, J. S. (2010). Cognitive function before and after intensity-modulated radiation therapy in patients with nasopharyngeal carcinoma: A prospective study. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 722-726. *Exclude: Study size*
- Hsieh, C. H., Chung, S. D., Chan, P. H., Lai, S. K., Chang, H. C., Hsiao, C. H., . . . Shueng, P. W. (2011). Intensity modulated radiotherapy for elderly bladder cancer patients. *Radiation Oncology*, 6, 75. *Exclude: Study size*
- Hsieh, C. H., Liu, C. Y., Shueng, P. W., Chong, N. S., Chen, C. J., Chen, M. J., . . . Chen, Y. J. (2010). Comparison of coplanar and noncoplanar intensity-modulated radiation therapy and helical tomotherapy for hepatocellular carcinoma. *Radiation Oncology*, 5, 40. *Exclude: Study size*
- Hsieh, C. H., Wei, M. C., Lee, H. Y., Hsiao, S. M., Chen, C. A., Wang, L. Y., . . . Shueng, P. W. (2009). Whole pelvic helical tomotherapy for locally advanced cervical cancer: Technical implementation of IMRT with helical tomotherapy. *Radiation Oncology*, 4, 62. *Exclude: Study size*
- Hsin, C. H., Chen, T. H., Young, Y. H., & Liu, W. S. (2010). Comparison of otologic complications between intensity-modulated and two-dimensional radiotherapies in nasopharyngeal carcinoma patients. *Otolaryngology - Head & Neck Surgery*, 143(5), 662-668. : *Study size*
- Hsiung, C. Y., Yorke, E. D., Chui, C. S., Hunt, M. A., Ling, C. C., Huang, E. Y., . . . Amols, H. I. (2002). Intensity-modulated radiotherapy versus conventional three-dimensional conformal radiotherapy for boost or salvage treatment of nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 53(3), 638-647. *Exclude: Sample size*
- Hsu, F. M., Lee, Y. C., Lee, J. M., Hsu, C. H., Lin, C. C., Tsai, Y. C., . . . Cheng, J. C. (2009). Association of clinical and dosimetric factors with postoperative pulmonary complications in esophageal cancer patients receiving intensity-modulated radiation therapy and concurrent chemotherapy followed by thoracic esophagectomy. *Annals of Surgical Oncology*, 16(6), 1669-1677. *Exclude: Treatment planning*
- Hu, C. C., Huang, W. T., Tsai, C. L., Wu, J. K., Chao, H. L., Huang, G. M., . . . Cheng, J. C. (2011). Practically acquired and modified cone-beam computed tomography images for accurate dose calculation in head and neck cancer. *Strahlentherapie Und Onkologie*, 187(10), 633-644. *Exclude: Treatment planning*
- Hu, K., & Harrison, L. B. (2005). Point: Brachytherapy versus intensity-modulated radiation therapy in the management of base of tongue cancers. *Brachytherapy*, 4(1), 1-4. *Exclude: Study design (comment)*
- Hua, C., Gray, J. M., Merchant, T. E., Kun, L. E., & Krasin, M. J. (2008). Treatment planning and delivery of external beam radiotherapy for pediatric sarcoma: The st. jude children's research hospital experience. *International Journal of Radiation Oncology, Biology, Physics*, 70(5), 1598-1606. *Exclude: Treatment planning*
- Hua, C., Shukla, H. I., Merchant, T. E., & Krasin, M. J. (2007). Estimating differences in volumetric flat bone growth in pediatric patients by radiation treatment method. *International Journal of Radiation Oncology, Biology, Physics*, 67(2), 552-558. *Exclude: Study size*
- Huang, D., Xia, P., Akazawa, P., Akazawa, C., Quivey, J. M., Verhey, L. J., . . . Lee, N. (2003). Comparison of treatment plans using intensity-modulated radiotherapy and three-dimensional conformal radiotherapy for paranasal sinus carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 158-168. *Exclude: Date*
- Huang, E., Teh, B. S., Strother, D. R., Davis, Q. G., Chiu, J. K., Lu, H. H., . . . Woo, S. Y. (2002). Intensity-modulated radiation therapy for pediatric medulloblastoma: Early report on the reduction of ototoxicity. *International Journal of Radiation Oncology, Biology, Physics*, 52(3), 599-605. *Exclude: Date*
- Huang, E. Y., Wang, C. J., Lan, J. H., Chen, H. C., Fang, F. M., Hsu, H. C., . . . Wang, Y. M. (2010). Factors for predicting rectal dose of high-dose-rate intracavitary brachytherapy after pelvic irradiation in patients with cervical cancer: A retrospective study with radiography-based dosimetry. *International Journal of Radiation Oncology, Biology, Physics*, 76(2), 490-495. *Exclude: Treatment planning*

- Huang, J., Kestin, L. L., Ye, H., Wallace, M., Martinez, A. A., & Vicini, F. A. (2011). Analysis of second malignancies after modern radiotherapy versus prostatectomy for localized prostate cancer. *Radiotherapy & Oncology*, 98(1), 81-86. *Exclude: Outcomes not specific to IMRT*
- Huang, K., Xia, P., Chuang, C., Weinberg, V., Glastonbury, C. M., Eisele, D. W., . . . Quivey, J. M. (2008). Intensity-modulated chemoradiation for treatment of stage III and IV oropharyngeal carcinoma: The university of california-san francisco experience. *Cancer*, 113(3), 497-507. *Exclude: Date*
- Huang, S. H., Catton, C., Jezioranski, J., Bayley, A., Rose, S., & Rosewall, T. (2008). The effect of changing technique, dose, and PTV margin on therapeutic ratio during prostate radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1057-1064. *Exclude: Treatment planning*
- Huang, W. Y., Jen, Y. M., Chen, C. M., Su, Y. F., Lin, C. S., Lin, Y. S., . . . Chang, L. P. (2010). Intensity modulated radiotherapy with concurrent chemotherapy for larynx preservation of advanced resectable hypopharyngeal cancer. *Radiation Oncology*, 5, 37. *Exclude: Comparator not of interest (surgery)*
- Huber, G. F., Gengler, C., Walter, C., Roth, T., Huber, A., & Holzmann, D. (2011). Adenocarcinoma of the nasal cavity and paranasal sinuses: Single-institution review of diagnosis, histology, and outcome. *Journal of Otolaryngology: Head and Neck Surgery*, 40(1), 34-39. *Exclude: Intervention not of interest (surgery)*
- Hudson, F., Coulshed, D., D'Souza, E., & Baker, C. (2010). Effect of radiation therapy on the latest generation of pacemakers and implantable cardioverter defibrillators: A systematic review. *Journal of Medical Imaging & Radiation Oncology*, 54(1), 53-61. *Exclude: Intervention not of interest (pacemakers and ICDs)*
- Hugo, G. D., Agazaryan, N., & Solberg, T. D. (2002). An evaluation of gating window size, delivery method, and composite field dosimetry of respiratory-gated IMRT. *Medical Physics*, 29(11), 2517-2525. *Exclude: Treatment planning*
- Hugo, G. D., Agazaryan, N., & Solberg, T. D. (2003). The effects of tumor motion on planning and delivery of respiratory-gated IMRT. *Medical Physics*, 30(6), 1052-1066. *Exclude: Treatment planning*
- Huh, S. J., Han, Y., Park, W., & Yang, J. H. (2005). Interfractional dose variation due to seromas in radiotherapy of breast cancer. *Medical Dosimetry*, 30(1), 8-11. *Exclude: Study size*
- Huisman, H. J., Futterer, J. J., van Lin, E. N., Welmers, A., Scheenen, T. W., van Dalen, J. A., . . . Barentsz, J. O. (2005). Prostate cancer: Precision of integrating functional MR imaging with radiation therapy treatment by using fiducial gold markers. *Radiology*, 236(1), 311-317. *Exclude: Treatment planning*
- Hummel, S., Paisley, S., Morgan, A., Currie, E., & Brewer, N. (2003). Clinical and cost-effectiveness of new and emerging technologies for early localised prostate cancer: A systematic review. *Health Technology Assessment (Winchester, England)*, 7(33), iii, ix-x, 1-157. *Exclude: Date*
- Hunt, M. A., Jackson, A., Narayana, A., & Lee, N. (2006). Geometric factors influencing dosimetric sparing of the parotid glands using IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 66(1), 296-304. *Exclude: Treatment planning*
- Huq, M. S., Fraass, B. A., Dunscombe, P. B., Gibbons, J. P., Jr, Ibbott, G. S., Medin, P. M., . . . Yorke, E. D. (2008). A method for evaluating quality assurance needs in radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(1 Suppl), S170-3. *Exclude: Treatment planning*
- Hwang, A. B., Kinsey, E., & Xia, P. (2009). Investigation of the dosimetric accuracy of the isocenter shifting method in prostate cancer patients with and without hip prostheses. *Medical Physics*, 36(11), 5221-5227. *Exclude: Treatment planning*
- Hysing, L. B., Skorpen, T. N., Alber, M., Fjellsbo, L. B., Helle, S. I., & Muren, L. P. (2008). Influence of organ motion on conformal vs. intensity-modulated pelvic radiotherapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1496-1503. *Exclude: Treatment planning*
- Igdem, S., Ercan, T., Alco, G., Zengin, F., Ozgules, R., Geceer, G., . . . Turkan, S. (2009). Dosimetric comparison of intensity modulated pelvic radiotherapy with 3D conformal radiotherapy in patients with gynecologic malignancies. *European Journal of Gynaecological Oncology*, 30(5), 547-551. *Exclude: Study size*

- Igdbashian, L., Fortin, B., Guertin, L., Soulieres, D., Coulombe, G., Belair, M., . . . Nguyen-Tan, P. F. (2010). Outcome with neck dissection after chemoradiation for N3 head-and-neck squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 414-420. Exclude: Intervention not of interest (neck dissection)
- IMRT Documentation Working, G., Holmes, T., Das, R., Low, D., Yin, F. F., Balter, J., . . . Fastro. (2009). American society of radiation oncology recommendations for documenting intensity-modulated radiation therapy treatments. *International Journal of Radiation Oncology, Biology, Physics*, 74(5), 1311-1318. Exclude: Treatment planning, guideline
- Iori, M., Cagni, E., Paiusco, M., Munro, P., & Nahum, A. E. (2010). Dosimetric verification of IMAT delivery with a conventional EPID system and a commercial portal dose image prediction tool. *Medical Physics*, 37(1), 377-390. Exclude: Treatment planning
- Iori, M., Cattaneo, G. M., Cagni, E., Fiorino, C., Borasi, G., Riccardo, C., . . . Nahum, A. E. (2008). Dose-volume and biological-model based comparison between helical tomotherapy and (inverse-planned) IMAT for prostate tumours. *Radiotherapy & Oncology*, 88(1), 34-45. Exclude: Study size
- Ippolito, E., Mertens, I., Haustermans, K., Gambacorta, M. A., Pasini, D., & Valentini, V. (2008). IGRT in rectal cancer. *Acta Oncologica*, 47(7), 1317-1324. Exclude: Study design (narrative review)
- Ishikura, S. (2008). Quality assurance of radiotherapy in cancer treatment: Toward improvement of patient safety and quality of care. *Japanese Journal of Clinical Oncology*, 38(11), 723-729. Exclude: Study design (narrative review)
- Iuchi, T., Hatano, K., Narita, Y., Kodama, T., Yamaki, T., & Osato, K. (2006). Hypofractionated high-dose irradiation for the treatment of malignant astrocytomas using simultaneous integrated boost technique by IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 64(5), 1317-1324. Exclude: Included in Veldman (2008) and Staffurth (2010)
- Iyer, R., & Jhingran, A. (2006). Radiation injury: Imaging findings in the chest, abdomen and pelvis after therapeutic radiation. *Cancer Imaging*, 6, S131-9. Exclude: Study design (narrative)
- Jabbari, S., Kim, H. M., Feng, M., Lin, A., Tsien, C., Elshaikh, M., . . . Eisbruch, A. (2005). Matched case-control study of quality of life and xerostomia after intensity-modulated radiotherapy or standard radiotherapy for head-and-neck cancer: Initial report. *International Journal of Radiation Oncology, Biology, Physics*, 63(3), 725-731. Exclude: Study size
- Jacob, V., Bayer, W., Astner, S. T., Busch, R., & Kneschaurek, P. (2010). A planning comparison of dynamic IMRT for different collimator leaf thicknesses with helical tomotherapy and RapidArc for prostate and head and neck tumors. *Strahlentherapie Und Onkologie*, 186(9), 502-510. Exclude: Study size
- Jagsi, R., Ben-David, M. A., Moran, J. M., Marsh, R. B., Griffith, K. A., Hayman, J. A., & Pierce, L. J. (2010). Unacceptable cosmesis in a protocol investigating intensity-modulated radiotherapy with active breathing control for accelerated partial-breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 71-78. Exclude: Included in systematic review (Hayes 2012)
- Jain, P., Hunter, R. D., Livsey, J. E., Coyle, C., Swindell, R., & Davidson, S. E. (2007). Salvaging locoregional recurrence with radiotherapy after surgery in early cervical cancer. *Clinical Oncology (Royal College of Radiologists)*, 19(10), 763-768. Exclude: Outcomes not specific to IMRT
- Jain, P., Marchant, T., Green, M., Watkins, G., Davies, J., McCarthy, C., . . . Price, P. (2009). Inter-fraction motion and dosimetric consequences during breast intensity-modulated radiotherapy (IMRT). *Radiotherapy & Oncology*, 90(1), 93-98. Exclude: Study size
- Jakob, J., Wenz, F., Dinter, D. J., Strobel, P., & Hohenberger, P. (2009). Preoperative intensity-modulated radiotherapy combined with temozolomide for locally advanced soft-tissue sarcoma. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 810-816. Exclude: Study size



- Jalali, R., Malde, R., Bhutani, R., Budrukkar, A., Badwe, R., & Sarin, R. (2008). Prospective evaluation of concomitant tumour bed boost with whole breast irradiation in patients with locally advanced breast cancer undergoing breast-conserving therapy. *Breast*, 17(1), 64-70. *Exclude: Treatment planning*
- Jalali, R., Singh, S., & Budrukkar, A. (2007). Techniques of tumour bed boost irradiation in breast conserving therapy: Current evidence and suggested guidelines. *Acta Oncologica*, 46(7), 879-892. *Exclude: Study design (narrative review)*
- Jamema, S. V., Sharma, P. K., Laskar, S., Deshpande, D. D., & Shrivastava, S. K. (2007). Treatment planning comparison of electron arc therapy and photon intensity modulated radiotherapy for askin's tumor of chest wall. *Radiotherapy & Oncology*, 84(3), 257-265. *Exclude: Study size*
- Jang, S. Y., Liu, H. H., & Mohan, R. (2008). Underestimation of low-dose radiation in treatment planning of intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1537-1546. *Exclude: Treatment planning*
- Jang, S. Y., Liu, H. H., Mohan, R., & Siebers, J. V. (2007). Variations in energy spectra and water-to-material stopping-power ratios in three-dimensional conformal and intensity-modulated photon fields. *Medical Physics*, 34(4), 1388-1397. *Exclude: Treatment planning*
- Jani, A. B., Gratzle, J., & Correa, D. (2007). Influence of intensity-modulated radiotherapy on acute genitourinary and gastrointestinal toxicity in the treatment of localized prostate cancer. *Technology in Cancer Research & Treatment*, 6(1), 11-15. *Exclude: Date*
- Jani, A. B., Su, A., Correa, D., & Gratzle, J. (2007). Comparison of late gastrointestinal and genitourinary toxicity of prostate cancer patients undergoing intensity-modulated versus conventional radiotherapy using localized fields. *Prostate Cancer & Prostatic Diseases*, 10(1), 82-86. *Exclude: Date*
- Jani, A. B., Su, A., & Milano, M. T. (2006). Intensity-modulated versus conventional pelvic radiotherapy for prostate cancer: Analysis of acute toxicity. *Urology*, 67(1), 147-151. *Exclude: Date*
- Japan Clinical Oncology, G., Toita, T., Ohno, T., Kaneyasu, Y., Uno, T., Yoshimura, R., . . . Hiraoka, M. (2010). A consensus-based guideline defining the clinical target volume for pelvic lymph nodes in external beam radiotherapy for uterine cervical cancer. *Japanese Journal of Clinical Oncology*, 40(5), 456-463. *Exclude: Treatment planning*
- Jarry, G., & Verhaegen, F. (2007). Patient-specific dosimetry of conventional and intensity modulated radiation therapy using a novel full monte carlo phase space reconstruction method from electronic portal images. *Physics in Medicine & Biology*, 52(8), 2277-2299. *Exclude: Treatment planning*
- Jegannathen, A., Mais, K., Sykes, A., Lee, L., Yap, B., Birzgalis, A., . . . Slevin, N. (2011). Synchronous chemoradiotherapy in patients with locally advanced squamous cell carcinoma of the head and neck using capecitabine: A single-centre, open-label, single-group phase II study. *Clinical Oncology (Royal College of Radiologists)*, 23(2), 149-158. *Exclude: Intervention not of interest (chemotherapy and accelerated hypofractionated radical radiotherapy)*
- Jelen, U., Sohn, M., & Alber, M. (2005). A finite size pencil beam for IMRT dose optimization. *Physics in Medicine & Biology*, 50(8), 1747-1766. *Exclude: Treatment planning*
- Jensen, A. D., Krauss, J., Weichert, W., Bergmann, Z. P., Freier, K., Debus, J., & Munter, M. W. (2011). Disease control and functional outcome in three modern combined organ preserving regimens for locally advanced squamous cell carcinoma of the head and neck (SCCHN). *Radiation Oncology*, 6, 122. *Exclude: Outcomes not specific to IMRT*
- Jensen, A. D., Munter, M. W., Bischoff, H., Haselmann, R., Timke, C., Krempien, R., . . . Herfarth, K. K. (2006). Treatment of non-small cell lung cancer with intensity-modulated radiation therapy in combination with cetuximab: The NEAR protocol (NCT00115518). *BMC Cancer*, 6, 122. *Exclude: Study design (RCT description)*

- Jensen, A. D., Nikoghosyan, A., Hinke, A., Debus, J., & Munter, M. W. (2011). Combined treatment of adenoid cystic carcinoma with cetuximab and IMRT plus C12 heavy ion boost: ACCEPT [ACC, erbitux[REGISTERED] and particle therapy]. *BMC Cancer*, *11*, 70. *Exclude: Study design (narrative of clinical trial)*
- Jensen, J. M., Ihnen, E., Eilf, K., & Kimmig, B. (2003). Determination of field size limitations in stereotactic and intensity modulated radiotherapy. *Australasian Physical & Engineering Sciences in Medicine*, *26*(4), 168-172. *Exclude: Treatment planning*
- Jensen, R. L., Jensen, P. R., Shrieve, A. F., Hazard, L., & Shrieve, D. C. (2010). Overall and progression-free survival and visual and endocrine outcomes for patients with parasellar lesions treated with intensity-modulated stereotactic radiosurgery. *Journal of Neuro-Oncology*, *98*(2), 221-231. *Excluded: Study size*
- Jensen SB. Pedersen AM. Vissink A. Andersen E. Brown CG. Davies AN. Dutilh J. Fulton JS. Jankovic L. Lopes NN. Mello AL. Muniz LV. Murdoch-Kinch CA. Nair RG. Napenas JJ. Nogueira-Rodrigues A. Saunders D. Stirling B. von Bultzingslowen I. Weikel DS. Elting LS. Spijkervet FK. Brennan MT. Salivary Gland Hypofunction/Xerostomia Section. Oral Care Study Group. Multinational Association of Supportive Care in Cancer (MASCC)/International Society of Oral Oncology (ISOO). (2010). A systematic review of salivary gland hypofunction and xerostomia induced by cancer therapies: Management strategies and economic impact. *Supportive Care in Cancer*, *18*(8), 1061-1079. *Exclude: Outcomes not of interest (impact of xerostomia on QoL)*
- Jerezek-Fossa, B. A., Fariselli, L., Beltramo, G., Catalano, G., Serafini, F., Garibaldi, C., . . . Orecchia, R. (2009). Linac-based or robotic image-guided stereotactic radiotherapy for isolated lymph node recurrent prostate cancer. *Radiotherapy & Oncology*, *93*(1), 14-17. *Exclude: Study size*
- Jerezek-Fossa, B. A., & Orecchia, R. (2007). Evidence-based radiation oncology: Definitive, adjuvant and salvage radiotherapy for non-metastatic prostate cancer. *Radiotherapy & Oncology*, *84*(2), 197-215. *Exclude: Date*
- Jerezek-Fossa, B. A., Zarowski, A., Milani, F., & Orecchia, R. (2003). Radiotherapy-induced ear toxicity. *Cancer Treatment Reviews*, *29*(5), 417-430. *Exclude: Date*
- Jhingran, A., Salehpour, M., Sam, M., Levy, L., & Eifel, P. J. (2012). Vaginal motion and bladder and rectal volumes during pelvic intensity-modulated radiation therapy after hysterectomy. *International Journal of Radiation Oncology, Biology, Physics*, *82*(1), 256-262. *Exclude: Treatment planning*
- Jiang, S. B., Sharp, G. C., Neicu, T., Berbeco, R. I., Flampouri, S., & Bortfeld, T. (2006). On dose distribution comparison. *Physics in Medicine & Biology*, *51*(4), 759-776. *Exclude: Treatment planning*
- Jiang, X., Li, T., Liu, Y., Zhou, L., Xu, Y., Zhou, X., & Gong, Y. (2011). Planning analysis for locally advanced lung cancer: Dosimetric and efficiency comparisons between intensity-modulated radiotherapy (IMRT), single-arc/partial-arc volumetric modulated arc therapy (SA/PA-VMAT). *Radiation Oncology*, *6*, 140. *Exclude: Study size*
- Jin, J. Y., Klein, E. E., Kong, F. M., & Li, Z. (2005). An improved internal mammary irradiation technique in radiation treatment of locally advanced breast cancers. *Journal of Applied Clinical Medical Physics*, *6*(1), 84-93. *Exclude: Study size*
- Jin, J. Y., Yin, F. F., Ryu, S., Ajlouni, M., & Kim, J. H. (2005). Dosimetric study using different leaf-width MLCs for treatment planning of dynamic conformal arcs and intensity-modulated radiosurgery. *Medical Physics*, *32*(2), 405-411. *Exclude: Treatment planning*
- Jin, R., Min, Z., Song, E., Liu, H., & Ye, Y. (2010). A novel fluence map optimization model incorporating leaf sequencing constraints. *Physics in Medicine & Biology*, *55*(4), 1243-1264. *Exclude: Treatment planning*
- Jingu, K., Ariga, H., Kaneta, T., Takai, Y., Takeda, K., Katja, L., . . . Yamada, S. (2010). Focal dose escalation using FDG-PET-guided intensity-modulated radiation therapy boost for postoperative local recurrent rectal cancer: A planning study with comparison of DVH and NTCP. *BMC Cancer*, *10*, 127. *Exclude: Study size*
- Johansen, S., Cozzi, L., & Olsen, D. R. (2009). A planning comparison of dose patterns in organs at risk and predicted risk for radiation induced malignancy in the contralateral breast following radiation therapy of

- primary breast using conventional, IMRT and volumetric modulated arc treatment techniques. *Acta Oncologica*, 48(4), 495-503. *Exclude: Study size*
- Johansson, J., Blomquist, E., Montelius, A., Isacson, U., & Glimelius, B. (2004). Potential outcomes of modalities and techniques in radiotherapy for patients with hypopharyngeal carcinoma. *Radiotherapy & Oncology*, 72(2), 129-138. *Exclude: Study size*
- Johansson, J., Isacson, U., Lindman, H., Montelius, A., & Glimelius, B. (2002). Node-positive left-sided breast cancer patients after breast-conserving surgery: Potential outcomes of radiotherapy modalities and techniques. *Radiotherapy & Oncology*, 65(2), 89-98. *Exclude: Sample size*
- Johansson, K. A., Nilsson, P., Zackrisson, B., Ohlson, B., Kjellen, E., Mercke, C., . . . Wittgren, L. (2008). The quality assurance process for the ARTSCAN head and neck study - a practical interactive approach for QA in 3DCRT and IMRT. *Radiotherapy & Oncology*, 87(2), 290-299. *Exclude: Date*
- Johnson, M. T., McCullough, J., Nindl, G., & Chamberlain, J. K. (2003). Autoradiographic evaluation of electromagnetic field effects on serotonin (5HT1A) receptors in rat brain. *Biomedical Sciences Instrumentation*, 39, 466-470. *Exclude: Intervention not of interest (electromagnetic fields)*
- Johnston, M., Clifford, S., Bromley, R., Back, M., Oliver, L., & Eade, T. (2011). Volumetric-modulated arc therapy in head and neck radiotherapy: A planning comparison using simultaneous integrated boost for nasopharynx and oropharynx carcinoma. *Clinical Oncology (Royal College of Radiologists)*, 23(8), 503-511. *Exclude: Study size*
- Johnston, M. L., Vial, P., Wiltshire, K. L., Bell, L. J., Blome, S., Kerestes, Z., . . . Eade, T. N. (2011). Daily online bony correction is required for prostate patients without fiducial markers or soft-tissue imaging. *Clinical Oncology (Royal College of Radiologists)*, 23(7), 454-459. *Exclude: Treatment planning*
- Jolly, D., Alahakone, D., & Meyer, J. (2011). A RapidArc planning strategy for prostate with simultaneous integrated boost. *Journal of Applied Clinical Medical Physics*, 12(1), 3320. *Exclude: Treatment planning*
- Jones, A. O., & Das, I. J. (2005). Comparison of inhomogeneity correction algorithms in small photon fields. *Medical Physics*, 32(3), 766-776. *Exclude: Treatment planning*
- Jones, L., & Hoban, P. (2002). A comparison of physically and radiobiologically based optimization for IMRT. *Medical Physics*, 29(7), 1447-1455. *Exclude: Treatment planning*
- Joseph, K. J., Syme, A., Small, C., Warkentin, H., Quon, H., Ghosh, S., . . . Pedersen, J. (2010). A treatment planning study comparing helical tomotherapy with intensity-modulated radiotherapy for the treatment of anal cancer. *Radiotherapy & Oncology*, 94(1), 60-66. *Exclude: Study size*
- Jothybasu, K. S., Bahl, A., Subramani, V., Sharma, D. N., & Rath, G. K. (2008). Does image-guided radiotherapy (IG-IMRT) improve toxicity profile in whole pelvic-treated high-risk prostate cancer? comparison between IG-IMRT and IMRT: In regard to chung et al. (int J radiat oncol biol phys 2008. in press). *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1273. *Exclude: Study design (letter)*
- Ju, S. G., Han, Y., Kum, O., Cheong, K. H., Shin, E. H., Shin, J. S., . . . Ahn, Y. C. (2010). Comparison of film dosimetry techniques used for quality assurance of intensity modulated radiation therapy. *Medical Physics*, 37(6), 2925-2933. *Exclude: Treatment planning*
- Jung, S. H., Yoon, S. M., Park, S. H., Choi, I. S., Kim, J. K., Choi, E. K., . . . Kim, J. H. (2009). A treatment planning study on glioblastoma with different techniques using boron neutron capture therapy, 3-dimensional conformal radiotherapy, and intensity modulated radiotherapy. *Applied Radiation & Isotopes*, 67(7-8), 1180-1184. *Exclude: Treatment planning*
- Kader, H. A., Mydin, A. R., Wilson, M., Alexander, C., Shahi, J., Pathak, I., . . . Truong, P. T. (2011). Treatment outcomes of locally advanced oropharyngeal cancer: A comparison between combined modality radio-chemotherapy and two variants of single modality altered fractionation radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 80(4), 1030-1036. *Exclude: Intervention not of interest*

- Kahn, J., Loeffler, J. S., Niemierko, A., Chioocca, E. A., Batchelor, T., & Chakravarti, A. (2011). Long-term outcomes of patients with spinal cord gliomas treated by modern conformal radiation techniques. *International Journal of Radiation Oncology, Biology, Physics*, 81(1), 232-238. *Exclude: Comparator not of interest (proton beam)*
- Kainz, K., White, J., Herman, J., & Li, X. A. (2009). Investigation of helical tomotherapy for partial-breast irradiation of prone-positioned patients. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 275-282. *Exclude: Study size*
- Kalinowski, T. (2005). Reducing the number of monitor units in multileaf collimator field segmentation. *Physics in Medicine & Biology*, 50(6), 1147-1161. *Exclude: Treatment planning*
- Kam, M. K., Chau, R. M., Suen, J., Choi, P. H., & Teo, P. M. (2003). Intensity-modulated radiotherapy in nasopharyngeal carcinoma: Dosimetric advantage over conventional plans and feasibility of dose escalation. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 145-157. *Exclude: Sample size*
- Kam, M. K., Leung, S. F., Zee, B., Chau, R. M., Suen, J. J., Mo, F., . . . Chan, A. T. (2007). Prospective randomized study of intensity-modulated radiotherapy on salivary gland function in early-stage nasopharyngeal carcinoma patients. *Journal of Clinical Oncology*, 25(31), 4873-4879. *Exclude: Date*
- Kam, M. K., Teo, P. M., Chau, R. M., Cheung, K. Y., Choi, P. H., Kwan, W. H., . . . Chan, A. T. (2004). Treatment of nasopharyngeal carcinoma with intensity-modulated radiotherapy: The hong kong experience. *International Journal of Radiation Oncology, Biology, Physics*, 60(5), 1440-1450. *Exclude: Date*
- Kamath, S., Sahni, S., Li, J., Palta, J., & Ranka, S. (2003). Leaf sequencing algorithms for segmented multileaf collimation. *Physics in Medicine & Biology*, 48(3), 307-324. *Exclude: Treatment planning*
- Kamath, S., Sahni, S., Palta, J., Ranka, S., & Li, J. (2004). Optimal leaf sequencing with elimination of tongue-and-groove underdosage. *Physics in Medicine & Biology*, 49(3), N7-19. *Exclude: Treatment planning*
- Kamath, S., Sahni, S., Ranka, S., Li, J., & Palta, J. (2004). A comparison of step-and-shoot leaf sequencing algorithms that eliminate tongue-and-groove effects. *Physics in Medicine & Biology*, 49(14), 3137-3143. *Exclude: Treatment planning*
- Kamath, S., Sahni, S., Ranka, S., Li, J., & Palta, J. (2004). Optimal field splitting for large intensity-modulated fields. *Medical Physics*, 31(12), 3314-3323. *Exclude: Treatment planning*
- Kamprad, F., Ranft, D., Weber, A., & Hildebrandt, G. (2008). Functional changes of the gustatory organ caused by local radiation exposure during radiotherapy of the head-and-neck region. *Strahlentherapie Und Onkologie*, 184(3), 157-162. *Exclude: Date*
- Kan, M. W., Leung, L. H., Kwong, D. L., Wong, W., & Lam, N. (2010). Peripheral doses from noncoplanar IMRT for pediatric radiation therapy. *Medical Dosimetry*, 35(4), 255-263. *Exclude: Study size*
- Kao, J., Cesaretti, J. A., Stone, N. N., & Stock, R. G. (2011). Update on prostate brachytherapy: Long-term outcomes and treatment-related morbidity. *Current Urology Reports*, 12(3), 237-242. *Exclude: Intervention not of interest (brachytherapy)*
- Kapanen, M., Collan, J., Saari-lahti, K., Heikkinen, J., Kairemo, K., & Tenhunen, M. (2009). Accuracy requirements for head and neck intensity-modulated radiation therapy based on observed dose response of the major salivary glands. *Radiotherapy & Oncology*, 93(1), 109-114. *Exclude: Treatment planning*
- Karakoyun-Celik, O., Norris, C. M., Jr, Tishler, R., Mahadevan, A., Clark, J. R., Goldberg, S., . . . Busse, P. M. (2005). Definitive radiotherapy with interstitial implant boost for squamous cell carcinoma of the tongue base. *Head & Neck*, 27(5), 353-361. *Exclude: Date*
- Karger, C. P., Schulz-Ertner, D., Didinger, B. H., Debus, J., & Jakel, O. (2003). Influence of setup errors on spinal cord dose and treatment plan quality for cervical spine tumours: A phantom study for photon IMRT and heavy charged particle radiotherapy. *Physics in Medicine & Biology*, 48(19), 3171-3189. *Exclude: Treatment planning*

- Kassim, I., Dirkx, M. L., & Heijmen, B. J. (2009). Evaluation of the dosimetric impact of non-exclusion of the rectum from the boost PTV in IMRT treatment plans for prostate cancer patients. *Radiotherapy & Oncology*, *92*(1), 62-67. *Exclude: Treatment planning*
- Kato, T., Obata, Y., Kadoya, N., & Fuwa, N. (2009). A comparison of prone three-dimensional conformal radiotherapy with supine intensity-modulated radiotherapy for prostate cancer: Which technique is more effective for rectal sparing?. *British Journal of Radiology*, *82*(980), 654-661. *Exclude: Study size*
- Kauh, J., Koshy, M., Gunthel, C., Joyner, M. M., Landry, J., & Thomas, C. R., Jr. (2005). Management of anal cancer in the HIV-positive population. *Oncology (Williston Park)*, *19*(12), 1634-1638. *Exclude: Study design (narrative review)*
- Keall, P. J., Cattell, H., Pokhrel, D., Dieterich, S., Wong, K. H., Murphy, M. J., . . . Mohan, R. (2006). Geometric accuracy of a real-time target tracking system with dynamic multileaf collimator tracking system. *International Journal of Radiation Oncology, Biology, Physics*, *65*(5), 1579-1584. *Exclude: Treatment planning*
- Keiler, L., Dobbins, D., Kulasekera, R., & Einstein, D. (2007). Tomotherapy for prostate adenocarcinoma: A report on acute toxicity. *Radiotherapy & Oncology*, *84*(2), 171-176. *Exclude: Date*
- Kerkhof, E. M., van der Put, R. W., Raaymakers, B. W., van der Heide, U. A., Jurgenliemk-Schulz, I. M., & Lagendijk, J. J. (2009). Intrafraction motion in patients with cervical cancer: The benefit of soft tissue registration using MRI. *Radiotherapy & Oncology*, *93*(1), 115-121. *Exclude: Treatment planning*
- Khan, A. J., Kirk, M. C., Mehta, P. S., Seif, N. S., Griem, K. L., Bernard, D. A., . . . Dickler, A. (2006). A dosimetric comparison of three-dimensional conformal, intensity-modulated radiation therapy, and MammoSite partial-breast irradiation. *Brachytherapy*, *5*(3), 183-188. *Exclude: Study size*
- Khuntia, D., Reddy, C. A., Mahadevan, A., Klein, E. A., & Kupelian, P. A. (2004). Recurrence-free survival rates after external-beam radiotherapy for patients with clinical T1-T3 prostate carcinoma in the prostate-specific antigen era: What should we expect?. *Cancer*, *100*(6), 1283-1292. *Exclude: Date*
- Kidd, E. A., Siegel, B. A., Dehdashti, F., Rader, J. S., Mutic, S., Mutch, D. G., . . . Grigsby, P. W. (2010). Clinical outcomes of definitive intensity-modulated radiation therapy with fluorodeoxyglucose-positron emission tomography simulation in patients with locally advanced cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, *77*(4), 1085-1091.
- Kim, B., Dillman, R. O., Chen, P., Hafer, R., Cox, C., Barth, N., . . . Mackintosh, R. (2012). A retrospective study of induction chemotherapy with docetaxel, cisplatin, and 5-fluorouracil followed by concurrent radiotherapy with cetuximab in locally advanced head and neck cancer. *American Journal of Otolaryngology*, *33*(1), 93-97. *Exclude: Study size*
- Kim, J. Y., Kim, D. Y., Kim, T. H., Park, S. Y., Lee, S. B., Shin, K. H., . . . Cho, K. H. (2007). Intensity-modulated radiotherapy with a belly board for rectal cancer. *International Journal of Colorectal Disease*, *22*(4), 373-379. *Exclude: Treatment planning*
- Kim, S., Akpati, H. C., Li, J. G., Liu, C. R., Amdur, R. J., & Palta, J. R. (2004). An immobilization system for claustrophobic patients in head-and-neck intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, *59*(5), 1531-1539. *Exclude: Treatment planning*
- Kim, S., Jin, H., Yang, H., & Amdur, R. J. (2009). A study on target positioning error and its impact on dose variation in image-guided stereotactic body radiotherapy for the spine. *International Journal of Radiation Oncology, Biology, Physics*, *73*(5), 1574-1579. *Exclude: Study size*
- Kim, S., Lee, I. J., Kim, Y. B., Koom, W. S., Jeon, B. C., Lee, C. G., . . . Keum, K. C. (2009). A comparison of treatment plans using linac-based intensity-modulated radiation therapy and helical tomotherapy for maxillary sinus carcinoma. *Technology in Cancer Research & Treatment*, *8*(4), 257-263. *Exclude: Study size*
- Kim, Y., & Tome, W. A. (2008). Is it beneficial to selectively boost high-risk tumor subvolumes? A comparison of selectively boosting high-risk tumor subvolumes versus homogeneous dose escalation of the entire tumor based on equivalent EUD plans. *Acta Oncologica*, *47*(5), 906-916. *Exclude: Treatment planning*

- Kim, Y., Verhey, L. J., & Xia, P. (2007). A feasibility study of using conventional jaws to deliver IMRT plans in the treatment of prostate cancer. *Physics in Medicine & Biology*, 52(8), 2147-2156. *Exclude: Study size*
- Kim, Y. J., Go, H., Wu, H. G., Jeon, Y. K., Park, S. W., & Lee, S. H. (2011). Immunohistochemical study identifying prognostic biomolecular markers in nasopharyngeal carcinoma treated by radiotherapy. *Head & Neck*, 33(10), 1458-1466. *Exclude: Outcome not of interest (prognostic genetic markers)*
- King, C. R., Lehmann, J., Adler, J. R., & Hai, J. (2003). CyberKnife radiotherapy for localized prostate cancer: Rationale and technical feasibility. *Technology in Cancer Research & Treatment*, 2(1), 25-30. *Exclude: Date*
- Kinhikar, R. A., Deshpande, S. S., Mahantshetty, U., Sarin, R., Shrivastava, S. K., & Deshpande, D. D. (2005). HDR brachytherapy combined with 3-D conformal vs. IMRT in left-sided breast cancer patients including internal mammary chain: Comparative analysis of dosimetric and technical parameters. *Journal of Applied Clinical Medical Physics*, 6(3), 1-12. *Exclude: Treatment planning*
- Kinhikar, R. A., Upreti, R., Sharma, S., Tambe, C. M., & Deshpande, D. D. (2007). Intensity modulated radiotherapy dosimetry with ion chambers, TLD, MOSFET and EDR2 film. *Australasian Physical & Engineering Sciences in Medicine*, 30(1), 25-32. *Exclude: Study size*
- Kissick, M. W., Boswell, S. A., Jeraj, R., & Mackie, T. R. (2005). Confirmation, refinement, and extension of a study in intrafraction motion interplay with sliding jaw motion. *Medical Physics*, 32(7), 2346-2350. *Exclude: Treatment planning*
- Kjaer-Kristoffersen, F., Ohlhues, L., Medin, J., & Korreman, S. (2009). RapidArc volumetric modulated therapy planning for prostate cancer patients. *Acta Oncologica*, 48(2), 227-232. *Exclude: Study size*
- Koh, W. J. (2003). Controversies in the radiotherapeutic management of cervical cancer. *Journal of Clinical Oncology*, 21(10 Suppl), 218s-223s. *Exclude: Study design (narrative review)*
- Koh, W. Y., Ren, W., Mukherjee, R. K., & Chung, H. T. (2009). Internal audit of a comprehensive IMRT program for prostate cancer: A model for centers in developing countries?. *International Journal of Radiation Oncology, Biology, Physics*, 74(5), 1447-1454. *Exclude: Treatment planning*
- Kollmeier, M. A., & Zelefsky, M. J. (2011). Brachytherapy for clinically localized prostate cancer: Optimal patient selection. *Archivos Espanoles De Urologia*, 64(8), 847-857. *Exclude: Study design (narrative review)*
- Konski, A., Speier, W., Hanlon, A., Beck, J. R., & Pollack, A. (2007). Is proton beam therapy cost effective in the treatment of adenocarcinoma of the prostate?. *Journal of Clinical Oncology*, 25(24), 3603-3608. *Exclude: Comparator not of interest (proton beam)*
- Konski, A., Watkins-Bruner, D., Feigenberg, S., Hanlon, A., Kulkarni, S., Beck, J. R., . . . Pollack, A. (2006). Using decision analysis to determine the cost-effectiveness of intensity-modulated radiation therapy in the treatment of intermediate risk prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 66(2), 408-415. *Exclude: Date*
- Koom, W. S., Kim, T. H., Shin, K. H., Pyo, H. R., Kim, J. Y., Kim, D. Y., . . . Cho, K. H. (2008). SMART (simultaneous modulated accelerated radiotherapy) for locally advanced nasopharyngeal carcinomas. *Head & Neck*, 30(2), 159-169. *Exclude: Date*
- Koong, A. C., Christofferson, E., Le, Q. T., Goodman, K. A., Ho, A., Kuo, T., . . . Yang, G. P. (2005). Phase II study to assess the efficacy of conventionally fractionated radiotherapy followed by a stereotactic radiosurgery boost in patients with locally advanced pancreatic cancer. *International Journal of Radiation Oncology, Biology, Physics*, 63(2), 320-323. *Exclude: Study size*
- Kopp, R. W., Duff, M., Catalfamo, F., Shah, D., Rajeci, M., & Ahmad, K. (2011). VMAT vs. 7-field-IMRT: Assessing the dosimetric parameters of prostate cancer treatment with a 292-patient sample. *Medical Dosimetry*, 36(4), 365-372. *Exclude: Treatment planning*
- Kortmann, R. D., Timmermann, B., Taylor, R. E., Scarzello, G., Plasswilm, L., Paulsen, F., . . . Bamberg, M. (2003). Current and future strategies in radiotherapy of childhood low-grade glioma of the brain. part I: Treatment

- modalities of radiation therapy. *Strahlentherapie Und Onkologie*, 179(8), 509-520. *Exclude: Intervention not of interest (did not include IMRT)*
- Koshy, M., Paulino, A. C., Marcus, R. B., Jr, Ting, J. Y., Whitaker, D., & Davis, L. W. (2004). Extra-target doses in children receiving multileaf collimator (MLC) based intensity modulated radiation therapy (IMRT). *Pediatric Blood & Cancer*, 42(7), 626-630. *Exclude: Study size*
- Koshy, M., Zhang, B., Naqvi, S., Liu, B., & Mohiuddin, M. M. (2010). A novel technique for post-mastectomy breast irradiation utilising non-coplanar intensity-modulated radiation therapy. *British Journal of Radiology*, 83(994), 874-881. *Exclude: Study size*
- Koutcher, L., Ballangrud, A., Cordeiro, P. G., McCormick, B., Hunt, M., Van Zee, K. J., . . . Beal, K. (2010). Postmastectomy intensity modulated radiation therapy following immediate expander-implant reconstruction. *Radiotherapy & Oncology*, 94(3), 319-323. *Exclude: Treatment planning*
- Koutcher, L., Sherman, E., Fury, M., Wolden, S., Zhang, Z., Mo, Q., . . . Lee, N. (2011). Concurrent cisplatin and radiation versus cetuximab and radiation for locally advanced head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), 915-922. *Exclude: Comparators not of interest (chemotherapies)*
- Kozak, K. R., Adams, J., Krejcarek, S. J., Tarbell, N. J., & Yock, T. I. (2009). A dosimetric comparison of proton and intensity-modulated photon radiotherapy for pediatric parameningeal rhabdomyosarcomas. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 179-186. *Exclude: Study size*
- Kragl, G., af Wetterstedt, S., Knausl, B., Lind, M., McCavana, P., Knoos, T., . . . Georg, D. (2009). Dosimetric characteristics of 6 and 10MV unflattened photon beams. *Radiotherapy & Oncology*, 93(1), 141-146. *Exclude: Treatment planning*
- Kragl, G., Baier, F., Lutz, S., Albrich, D., Dalaryd, M., Kroupa, B., . . . Georg, D. (2011). Flattening filter free beams in SBRT and IMRT: Dosimetric assessment of peripheral doses. *Zeitschrift Fur Medizinische Physik*, 21(2), 91-101. *Exclude: Treatment planning*
- Krasin, M. J., Crawford, B. T., Zhu, Y., Evans, E. S., Sontag, M. R., Kun, L. E., & Merchant, T. E. (2004). Intensity-modulated radiation therapy for children with intraocular retinoblastoma: Potential sparing of the bony orbit. *Clinical Oncology (Royal College of Radiologists)*, 16(3), 215-222. *Exclude: Treatment planning*
- Krasin, M. J., Davidoff, A. M., Xiong, X., Wu, S., Hua, C. H., Navid, F., . . . Spunt, S. L. (2010). Preliminary results from a prospective study using limited margin radiotherapy in pediatric and young adult patients with high-grade nonrhabdomyosarcoma soft-tissue sarcoma. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 874-878. *Exclude: Comparator not of interest (brachytherapy)*
- Krasin, M. J., Hoth, K. A., Hua, C., Gray, J. M., Wu, S., & Xiong, X. (2009). Incidence and correlates of radiation dermatitis in children and adolescents receiving radiation therapy for the treatment of paediatric sarcomas. *Clinical Oncology (Royal College of Radiologists)*, 21(10), 781-785. *Exclude: Outcomes not specific to IMRT*
- Krayenbuehl, J., Davis, J. B., & Ciernik, I. F. (2006). Dynamic intensity-modulated non-coplanar arc radiotherapy (INCA) for head and neck cancer. *Radiotherapy & Oncology*, 81(2), 151-157. *Exclude: Study size*
- Krayenbuehl, J., Oertel, S., Davis, J. B., & Ciernik, I. F. (2007). Combined photon and electron three-dimensional conformal versus intensity-modulated radiotherapy with integrated boost for adjuvant treatment of malignant pleural mesothelioma after pleuropneumectomy. *International Journal of Radiation Oncology, Biology, Physics*, 69(5), 1593-1599. *Exclude: Study size*
- Krempien, R., Muentner, M. W., Huber, P. E., Nill, S., Friess, H., Timke, C., . . . Debus, J. (2005). Randomized phase II--study evaluating EGFR targeting therapy with cetuximab in combination with radiotherapy and chemotherapy for patients with locally advanced pancreatic cancer--PARC: Study protocol [ISRCTN56652283]. *BMC Cancer*, 5, 131. *Exclude: Study design (narrative of clinical trial)*
- Kristensen, C. A., Kjaer-Kristoffersen, F., Sapru, W., Berthelsen, A. K., Loft, A., & Specht, L. (2007). Nasopharyngeal carcinoma. treatment planning with IMRT and 3D conformal radiotherapy. *Acta Oncologica*, 46(2), 214-220. *Exclude: Date*

- Kristensen, C. A., Nottrup, T. J., Berthelsen, A. K., Kjaer-Kristoffersen, F., Ravn, J., Sorensen, J. B., & Engelholm, S. A. (2009). Pulmonary toxicity following IMRT after extrapleural pneumonectomy for malignant pleural mesothelioma. *Radiotherapy & Oncology*, 92(1), 96-99. *Exclude: Study size (harms)*
- Krstevska, V., Stojkovski, I., & Lukarski, D. (2010). Concurrent radiochemotherapy in advanced hypopharyngeal cancer. *Radiation Oncology*, 5, 39. *Exclude: Intervention not of interest (3DCRT)*
- Kubes, J., Cvek, J., Vondracek, V., Pala, M., & Feltl, D. (2011). Accelerated radiotherapy with concomitant boost technique (69.5 Gy/5 weeks) : An alternative in the treatment of locally advanced head and neck cancer. *Strahlentherapie Und Onkologie*, 187(10), 651-655. *Exclude: Outcomes not specific to IMRT*
- Kubicek, G. J., Naguib, M., Redfield, S., Grayback, N., Olszanski, A., Dawson, G., & Brown, S. I. (2010). PSA decrease during combined-modality radiotherapy predicts for treatment outcome. *International Journal of Radiation Oncology, Biology, Physics*, 78(3), 759-762. *Exclude: Intervention not of interest (PSA)*
- Kudchadker, R. J., Chang, E. L., Bryan, F., Maor, M. H., & Famiglietti, R. (2004). An evaluation of radiation exposure from portal films taken during definitive course of pediatric radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 59(4), 1229-1235. *Exclude: Treatment planning*
- Kuijper, I. T., Dahele, M., Senan, S., & Verbakel, W. F. (2010). Volumetric modulated arc therapy versus conventional intensity modulated radiation therapy for stereotactic spine radiotherapy: A planning study and early clinical data. *Radiotherapy & Oncology*, 94(2), 224-228. *Exclude: Study size*
- Kulik, C., Caudrelier, J. M., Vermandel, M., Castelain, B., Maouche, S., & Rousseau, J. (2002). Conformal radiotherapy optimization with micromultileaf collimators: Comparison with radiosurgery techniques. *International Journal of Radiation Oncology, Biology, Physics*, 53(4), 1038-1050. *Exclude: Sample size*
- Kung, J. H., Zygmanski, P., Choi, N., & Chen, G. T. (2003). A method of calculating a lung clinical target volume DVH for IMRT with intrafractional motion. *Medical Physics*, 30(6), 1103-1109. *Exclude: Treatment planning*
- Kung, S. W., Wu, V. W., Kam, M. K., Leung, S. F., Yu, B. K., Ngai, D. Y., . . . Chan, A. T. (2011). Dosimetric comparison of intensity-modulated stereotactic radiotherapy with other stereotactic techniques for locally recurrent nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 71-79. *Exclude: Intervention not of interest (stereotactic radiotherapy)*
- Kuo, H. C., Liu, W. S., Wu, A., Mah, D., Chuang, K. S., Hong, L., . . . Kalnicki, S. (2010). Biological impact of geometric uncertainties: What margin is needed for intra-hepatic tumors?. *Radiation Oncology*, 5, 48. *Exclude: Treatment planning*
- Kuo, Y. C., Chiu, Y. M., Shih, W. P., Yu, H. W., Chen, C. W., Wong, P. F., . . . Hwang, J. J. (2011). Volumetric intensity-modulated arc (RapidArc) therapy for primary hepatocellular carcinoma: Comparison with intensity-modulated radiotherapy and 3-D conformal radiotherapy. *Radiation Oncology*, 6, 76. *Exclude: Study size*
- Kupelian, P. A., Reddy, C. A., Carlson, T. P., Altsman, K. A., & Willoughby, T. R. (2002). Preliminary observations on biochemical relapse-free survival rates after short-course intensity-modulated radiotherapy (70 Gy at 2.5 Gy/fraction) for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 53(4), 904-912. *Exclude: Date*
- Kupelian, P. A., Reddy, C. A., Carlson, T. P., & Willoughby, T. R. (2002). Dose/volume relationship of late rectal bleeding after external beam radiotherapy for localized prostate cancer: Absolute or relative rectal volume?. *Cancer Journal*, 8(1), 62-66. *Exclude: Date*
- Kupelian, P. A., Willoughby, T. R., Reddy, C. A., Klein, E. A., & Mahadevan, A. (2007). Hypofractionated intensity-modulated radiotherapy (70 Gy at 2.5 Gy per fraction) for localized prostate cancer: Cleveland clinic experience. *International Journal of Radiation Oncology, Biology, Physics*, 68(5), 1424-1430. *Exclude: Date*
- Kupelian, P. A., Willoughby, T. R., Reddy, C. A., Klein, E. A., & Mahadevan, A. (2008). Impact of image guidance on outcomes after external beam radiotherapy for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1146-1150. *Exclude: Date*



- Kwong, D. L., Pow, E. H., Sham, J. S., McMillan, A. S., Leung, L. H., Leung, W. K., . . . Au, G. K. (2004). Intensity-modulated radiotherapy for early-stage nasopharyngeal carcinoma: A prospective study on disease control and preservation of salivary function. *Cancer*, *101*(7), 1584-1593. *Exclude: Date*
- La, T. H., Meyers, P. A., Wexler, L. H., Alektiar, K. M., Healey, J. H., Laquaglia, M. P., . . . Wolden, S. L. (2006). Radiation therapy for ewing's sarcoma: Results from memorial sloan-kettering in the modern era. *International Journal of Radiation Oncology, Biology, Physics*, *64*(2), 544-550. *Exclude: Outcomes not specific to IMRT*
- Lahanas, M., Schreiber, E., & Baltas, D. (2003). Multiobjective inverse planning for intensity modulated radiotherapy with constraint-free gradient-based optimization algorithms. *Physics in Medicine & Biology*, *48*(17), 2843-2871. *Exclude: Treatment planning*
- Lalondrelle, S., Huddart, R., Warren-Oseni, K., Hansen, V. N., McNair, H., Thomas, K., . . . Khoo, V. (2011). Adaptive-predictive organ localization using cone-beam computed tomography for improved accuracy in external beam radiotherapy for bladder cancer. *International Journal of Radiation Oncology, Biology, Physics*, *79*(3), 705-712. *Exclude: Treatment planning*
- Lamers-Kuijper, E., Schwarz, M., Rasch, C., & Mijneer, B. (2007). Intensity-modulated vs. conformal radiotherapy of parotid gland tumors: Potential impact on hearing loss. *Medical Dosimetry*, *32*(4), 237-245. *Exclude: Date*
- Landoni, V., Saracino, B., Marzi, S., Gallucci, M., Petrongari, M. G., Chianese, E., . . . Arcangeli, G. (2006). A study of the effect of setup errors and organ motion on prostate cancer treatment with IMRT. *International Journal of Radiation Oncology, Biology, Physics*, *65*(2), 587-594. *Exclude: Study size*
- Landry, J. C., Yang, G. Y., Ting, J. Y., Staley, C. A., Torres, W., Esiashvili, N., & Davis, L. W. (2002). Treatment of pancreatic cancer tumors with intensity-modulated radiation therapy (IMRT) using the volume at risk approach (VARA): Employing dose-volume histogram (DVH) and normal tissue complication probability (NTCP) to evaluate small bowel toxicity. *Medical Dosimetry*, *27*(2), 121-129. *Exclude: Sample size*
- Lanni, T. B., Jr, Grills, I. S., Kestin, L. L., & Robertson, J. M. (2011). Stereotactic radiotherapy reduces treatment cost while improving overall survival and local control over standard fractionated radiation therapy for medically inoperable non-small-cell lung cancer. *American Journal of Clinical Oncology*, *34*(5), 494-498. *Exclude: Intervention not of interest (SBRT)*
- Laskar, S., Bahl, G., Muckaden, M., Pai, S. K., Gupta, T., Banavali, S., . . . Dinshaw, K. A. (2008). Nasopharyngeal carcinoma in children: Comparison of conventional and intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, *72*(3), 728-736. *Exclude: Date*
- Lassen-Ramshad, Y., Vestergaard, A., Muren, L. P., Hoyer, M., & Petersen, J. B. (2011). Plan robustness in proton beam therapy of a childhood brain tumour. *Acta Oncologica*, *50*(6), 791-796. *Exclude: Study size*
- Laub, W. U., & Wong, T. (2003). The volume effect of detectors in the dosimetry of small fields used in IMRT. *Medical Physics*, *30*(3), 341-347. *Exclude: Treatment planning*
- Lavrenkov, K., Singh, S., Christian, J. A., Partridge, M., Nioutsikou, E., Cook, G., . . . Brada, M. (2009). Effective avoidance of a functional spect-perfused lung using intensity modulated radiotherapy (IMRT) for non-small cell lung cancer (NSCLC): An update of a planning study. *Radiotherapy & Oncology*, *91*(3), 349-352. *Exclude: Treatment planning*
- Lawson, J. D., Otto, K., Chen, A., Shin, D. M., Davis, L., & Johnstone, P. A. (2008). Concurrent platinum-based chemotherapy and simultaneous modulated accelerated radiation therapy for locally advanced squamous cell carcinoma of the tongue base. *Head & Neck*, *30*(3), 327-335. *Exclude: Date*
- Leal, A., Sanchez-Doblado, F., Arrans, R., Rosello, J., Pavon, E. C., & Lagares, J. I. (2003). Routine IMRT verification by means of an automated monte carlo simulation system. *International Journal of Radiation Oncology, Biology, Physics*, *56*(1), 58-68. *Exclude: Treatment planning*

- Lee, C. C., Huang, T. T., Lee, M. S., Hsiao, S. H., Lin, H. Y., Su, Y. C., . . . Hung, S. K. (2010). Clinical application of tumor volume in advanced nasopharyngeal carcinoma to predict outcome. *Radiation Oncology*, 5, 20. *Exclude: Study design (no comparator, retrospective review of 110 pts)*
- Lee, C. C., Su, Y. C., Ho, H. C., Hung, S. K., Lee, M. S., Chiou, W. Y., . . . Huang, Y. S. (2011). Increased risk of ischemic stroke in young nasopharyngeal carcinoma patients. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), e833-8. *Exclude: Intervention not fo interest*
- Lee, C. T., Bilton, S. D., Famiglietti, R. M., Riley, B. A., Mahajan, A., Chang, E. L., . . . Smith, A. R. (2005). Treatment planning with protons for pediatric retinoblastoma, medulloblastoma, and pelvic sarcoma: How do protons compare with other conformal techniques?. *International Journal of Radiation Oncology, Biology, Physics*, 63(2), 362-372. *Exclude: Study size*
- Lee, C. T., Dong, L., Ahamad, A. W., Choi, H., Cheung, R., Lee, A. K., . . . Kuban, D. A. (2005). Comparison of treatment volumes and techniques in prostate cancer radiation therapy. *American Journal of Clinical Oncology*, 28(6), 618-625. *Exclude: Study size*
- Lee, J. W., Choi, K. S., Hong, S., Kim, Y. L., Chung, J. B., Lee, D. H., . . . Suh, T. S. (2007). Effects of static dosimetric leaf gap on MLC-based small-beam dose distribution for intensity-modulated radiosurgery. *Journal of Applied Clinical Medical Physics*, 8(4), 2397. *Exclude: Treatment planning*
- Lee, L., Le, Q. T., & Xing, L. (2008). Retrospective IMRT dose reconstruction based on cone-beam CT and MLC log-file. *International Journal of Radiation Oncology, Biology, Physics*, 70(2), 634-644. *Exclude: Study size*
- Lee, M. T., Purdie, T. G., Eccles, C. L., Sharpe, M. B., & Dawson, L. A. (2010). Comparison of simple and complex liver intensity modulated radiotherapy. *Radiation Oncology*, 5, 115. *Exclude: Treatment planning*
- Lee, N. (2005). Counterpoint: Brachytherapy versus intensity-modulated radiation therapy in the management of base of tongue cancers. *Brachytherapy*, 4(1), 5-7. *Exclude: Study design (comment)*
- Lee, N., Akazawa, C., Akazawa, P., Quivey, J. M., Tang, C., Verhey, L. J., & Xia, P. (2004). A forward-planned treatment technique using multisegments in the treatment of head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 59(2), 584-594. *Exclude: Date*
- Lee, N., Nehmeh, S., Schoder, H., Fury, M., Chan, K., Ling, C. C., & Humm, J. (2009). Prospective trial incorporating pre-/mid-treatment [<sup>18</sup>F]-misonidazole positron emission tomography for head-and-neck cancer patients undergoing concurrent chemoradiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 101-108. *Exclude: Intervention not of interest ((<sup>18</sup>F)-FMISO PET scans)*
- Lee, N., Xia, P., Fischbein, N. J., Akazawa, P., Akazawa, C., & Quivey, J. M. (2003). Intensity-modulated radiation therapy for head-and-neck cancer: The UCSF experience focusing on target volume delineation. *International Journal of Radiation Oncology, Biology, Physics*, 57(1), 49-60. *Exclude: Date*
- Lee, N., Xia, P., Quivey, J. M., Sultanem, K., Poon, I., Akazawa, C., . . . Fu, K. K. (2002). Intensity-modulated radiotherapy in the treatment of nasopharyngeal carcinoma: An update of the UCSF experience. *International Journal of Radiation Oncology, Biology, Physics*, 53(1), 12-22. *Exclude: Date*
- Lee, N. Y., de Arruda, F. F., Puri, D. R., Wolden, S. L., Narayana, A., Mechalakos, J., . . . Zelefsky, M. J. (2006). A comparison of intensity-modulated radiation therapy and concomitant boost radiotherapy in the setting of concurrent chemotherapy for locally advanced oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 966-974. *Exclude: Date*
- Lee, N. Y., Mechalakos, J. G., Nehmeh, S., Lin, Z., Squire, O. D., Cai, S., . . . Schoder, H. (2008). Fluorine-18-labeled fluoromisonidazole positron emission and computed tomography-guided intensity-modulated radiotherapy for head and neck cancer: A feasibility study. *International Journal of Radiation Oncology, Biology, Physics*, 70(1), 2-13. *Exclude: Date*
- Lee, N. Y., O'Meara, W., Chan, K., Della-Bianca, C., Mechalakos, J. G., Zhung, J., . . . Pfister, D. G. (2007). Concurrent chemotherapy and intensity-modulated radiotherapy for locoregionally advanced laryngeal and

- hypopharyngeal cancers. *International Journal of Radiation Oncology, Biology, Physics*, 69(2), 459-468.  
*Exclude: Date*
- Lee, S. W., Back, G. M., Yi, B. Y., Choi, E. K., Ahn, S. D., Shin, S. S., . . . Kim, J. H. (2006). Preliminary results of a phase I/II study of simultaneous modulated accelerated radiotherapy for nondisseminated nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 65(1), 152-160. *Exclude: Date*
- Lee, T. F., Chao, P. J., Fang, F. M., Su, T. J., Leung, S. W., & Hsu, H. C. (2010). Helical tomotherapy for single and multiple liver tumours. *Radiation Oncology*, 5, 58. *Exclude: Study size*
- Lee, T. F., Fang, F. M., Chao, P. J., Su, T. J., Wang, L. K., & Leung, S. W. (2008). Dosimetric comparisons of helical tomotherapy and step-and-shoot intensity-modulated radiotherapy in nasopharyngeal carcinoma. *Radiotherapy & Oncology*, 89(1), 89-96. *Exclude: Date*
- Lee, T. T., Everett, D. L., Shu, H. K., Jahan, T. M., Roach, M., 3rd, Speight, J. L., . . . Jablons, D. M. (2002). Radical pleurectomy/decortication and intraoperative radiotherapy followed by conformal radiation with or without chemotherapy for malignant pleural mesothelioma. *Journal of Thoracic & Cardiovascular Surgery*, 124(6), 1183-1189. *Exclude: Outcomes not specific to IMRT*
- Lee, Y. K., Brooks, C. J., Bedford, J. L., Warrington, A. P., & Saran, F. H. (2012). Development and evaluation of multiple isocentric volumetric modulated arc therapy technique for craniospinal axis radiotherapy planning. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), 1006-1012. *Exclude: Study size*
- Leonard, C., Carter, D., Kercher, J., Howell, K., Henkenberns, P., Tallhamer, M., . . . Kondrat, J. (2007). Prospective trial of accelerated partial breast intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 67(5), 1291-1298. *Exclude: Date*
- Leonard, C. E., Johnson, T., Tallhamer, M., Howell, K., Kercher, J., Kaske, T., . . . Carter, D. L. (2011). Accelerated partial breast intensity-modulated radiotherapy in women who have prior breast augmentation. *Clinical Breast Cancer*, 11(3), 184-190. *Exclude: Study size*
- Lertbutsayanukul, C., Khorprasert, C., Shotelersuk, K., Jumpangern, C., Sanghangthum, T., Oonsiri, S., . . . Rojpornpradit, P. (2006). Intensity-modulated radiation therapy in head-and-neck cancer, first report in thailand. *Journal of the Medical Association of Thailand*, 89(12), 2068-2076. *Exclude: Study size*
- Lertbutsayanukul, C., Shotelersuk, K., Khorprasert, C., Sanghangthum, T., Oonsiri, S., Ayuthaya, I. I., . . . Rojpornpradit, P. (2008). A two-year experience of implementing 3 dimensional radiation therapy and intensity-modulated radiation therapy for 925 patients in king chulalongkorn memorial hospital. *Journal of the Medical Association of Thailand*, 91(2), 215-224. *Exclude: Intervention not of interest (pattern of care and utilization)*
- Leung, L. H., Kan, M. W., Cheng, A. C., Wong, W. K., & Yau, C. C. (2007). A new dose-volume-based plan quality index for IMRT plan comparison. *Radiotherapy & Oncology*, 85(3), 407-417. *Exclude: Study design (no comparator)*
- Leung, L. H., Wong, W. K., Cheng, A. C., Kan, M. W., Cheung, J. Y., Lam, N. K., . . . Yau, C. C. (2011). A new approach to computing normal tissue complication probability of an intensity-modulated radiotherapy treatment with stereotactic radiotherapy boost of nasopharyngeal carcinoma: A case study. *Medical Dosimetry*, 36(2), 138-144. *Exclude: Treatment planning*
- Levendag, P. C., Lagerwaard, F. J., de Pan, C., Noever, I., van Nimwegen, A., Wijers, O., & Nowak, P. J. (2002). High-dose, high-precision treatment options for boosting cancer of the nasopharynx. *Radiotherapy & Oncology*, 63(1), 67-74. *Exclude: Date*
- Levin, D., Menhel, J., Alezra, D., & Pfeffer, R. (2008). IMRT vs. 3D noncoplanar treatment plans for maxillary sinus tumors: A new tool for quantitative evaluation. *Medical Dosimetry*, 33(4), 275-281. *Exclude: Study size*
- Leybovich, L. B., Sethi, A., & Dogan, N. (2003). Comparison of ionization chambers of various volumes for IMRT absolute dose verification. *Medical Physics*, 30(2), 119-123. *Exclude: Treatment planning*

- Leybovich, L. B., Sethi, A., Dogan, N., Melian, E., Krasin, M., & Emami, B. (2002). An immobilization and localization technique for SRT and IMRT of intracranial tumors. *Journal of Applied Clinical Medical Physics*, 3(4), 317-322. *Exclude: Treatment planning*
- Li, B., Li, D., Lau, D. H., Farwell, D. G., Luu, Q., Rocke, D. M., . . . Chen, A. M. (2009). Clinical-dosimetric analysis of measures of dysphagia including gastrostomy-tube dependence among head and neck cancer patients treated definitively by intensity-modulated radiotherapy with concurrent chemotherapy. *Radiation Oncology*, 4, 52. *Exclude: Intervention not of interest (association between dose and various anatomical structures)*
- Li, B. S., Gong, H. Y., Huang, W., Yi, Y., Zhang, Z. C., Li, H. S., . . . Yu, J. M. (2011). Phase I study of concurrent selective lymph node late course accelerated hyper-fractionated radiotherapy and pemetrexed, cisplatin for locally advanced esophageal squamous cell carcinoma. *Diseases of the Esophagus*, 24(4), 251-257. *Exclude: Study size*
- Li, H. S., Romeijn, H. E., Fox, C., Palta, J. R., & Dempsey, J. F. (2008). A computational implementation and comparison of several intensity modulated proton therapy treatment planning algorithms. *Medical Physics*, 35(3), 1103-1112. *Exclude: Treatment planning*
- Li, J. G., Yan, G., & Liu, C. (2009). Comparison of two commercial detector arrays for IMRT quality assurance. *Journal of Applied Clinical Medical Physics*, 10(2), 2942. *Exclude: Treatment planning*
- Li, J. S., Freedman, G. M., Price, R., Wang, L., Anderson, P., Chen, L., . . . Ma, C. M. (2004). Clinical implementation of intensity-modulated tangential beam irradiation for breast cancer. *Medical Physics*, 31(5), 1023-1031. *Exclude: Treatment planning*
- Li, S., Rashid, A., He, S., & Djajaputra, D. (2004). A new approach in dose measurement and error analysis for narrow photon beams (beamlets) shaped by different multileaf collimators using a small detector. *Medical Physics*, 31(7), 2020-2032. *Exclude: Treatment planning*
- Li, Y., Taylor, J. M., Ten Haken, R. K., & Eisbruch, A. (2007). The impact of dose on parotid salivary recovery in head and neck cancer patients treated with radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 660-669. *Exclude: Date*
- Li, Y., Yao, J., & Yao, D. (2003). Genetic algorithm based deliverable segments optimization for static intensity-modulated radiotherapy. *Physics in Medicine & Biology*, 48(20), 3353-3374. *Exclude: Treatment planning*
- Lian, J., Cotrutz, C., & Xing, L. (2003). Therapeutic treatment plan optimization with probability density-based dose prescription. *Medical Physics*, 30(4), 655-666. *Exclude: Treatment planning*
- Lian, J., Mackenzie, M., Joseph, K., Pervez, N., Dundas, G., Urtasun, R., & Pearcey, R. (2008). Assessment of extended-field radiotherapy for stage IIIC endometrial cancer using three-dimensional conformal radiotherapy, intensity-modulated radiotherapy, and helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 70(3), 935-943. *Exclude: Study size*
- Lian, J., & Xing, L. (2004). Incorporating model parameter uncertainty into inverse treatment planning. *Medical Physics*, 31(9), 2711-2720. *Exclude: Treatment planning*
- Liang, K. L., Kao, T. C., Lin, J. C., Tseng, H. C., Su, M. C., Hsin, C. H., . . . Jiang, R. S. (2008). Nasal irrigation reduces postirradiation rhinosinusitis in patients with nasopharyngeal carcinoma. *American Journal of Rhinology*, 22(3), 258-262. *Exclude: Date*
- Liao, C. T., Lee, L. Y., Huang, S. F., Chen, I. H., Kang, C. J., Lin, C. Y., . . . Yen, T. C. (2011). Outcome analysis of patients with oral cavity cancer and extracapsular spread in neck lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), 930-937. *Exclude: Study design (no comparator)*
- Liao, Z. X., Komaki, R. R., Thames, H. D., Jr, Liu, H. H., Tucker, S. L., Mohan, R., . . . Cox, J. D. (2010). Influence of technologic advances on outcomes in patients with unresectable, locally advanced non-small-cell lung cancer receiving concomitant chemoradiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 775-781. *Exclude: Included in systematic review (De Neve 2012)*

- Liauw, S. L., Stadler, W. M., Correa, D., Weichselbaum, R. R., & Jani, A. B. (2010). Dose-escalated radiotherapy for high-risk prostate cancer: Outcomes in modern era with short-term androgen deprivation therapy. *International Journal of Radiation Oncology, Biology, Physics*, 77(1), 125-130. *Exclude: Intervention not of interest (androgen deprivation therapy)*
- Liberman, D., Trinh, Q. D., Jeldres, C., & Zorn, K. C. (2012). Is robotic surgery cost-effective: Yes. *Current Opinion in Urology*, 22(1), 61-65. *Exclude: Intervention not of interest (robotic surgery)*
- Lim, K., Kelly, V., Stewart, J., Xie, J., Cho, Y. B., Moseley, J., . . . Milosevic, M. (2009). Pelvic radiotherapy for cancer of the cervix: Is what you plan actually what you deliver?. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 304-312. *Exclude: Treatment planning*
- Lim, K., Small, W., Jr, Portelance, L., Creutzberg, C., Jurgenliemk-Schulz, I. M., Mundt, A., . . . Gyn IMRT, C. (2011). Consensus guidelines for delineation of clinical target volume for intensity-modulated pelvic radiotherapy for the definitive treatment of cervix cancer. *International Journal of Radiation Oncology, Biology, Physics*, 79(2), 348-355. *Exclude: Treatment planning*
- Lim, T. S., Cheung, P. C., Loblaw, D. A., Morton, G., Sixel, K. E., Pang, G., . . . Thomas, G. (2008). Hypofractionated accelerated radiotherapy using concomitant intensity-modulated radiotherapy boost technique for localized high-risk prostate cancer: Acute toxicity results. *International Journal of Radiation Oncology, Biology, Physics*, 72(1), 85-92. *Exclude: Date*
- Lin, A., Kim, H. M., Terrell, J. E., Dawson, L. A., Ship, J. A., & Eisbruch, A. (2003). Quality of life after parotid-sparing IMRT for head-and-neck cancer: A prospective longitudinal study. *International Journal of Radiation Oncology, Biology, Physics*, 57(1), 61-70. *Exclude: Date*
- Lin, D., Kashani-Sabet, M., McCalmont, T., & Singer, M. I. (2005). Neurotropic melanoma invading the inferior alveolar nerve. *Journal of the American Academy of Dermatology*, 53(2 Suppl 1), S120-2. *Exclude: Study size*
- Lin, S. H., Sugar, E., Teslow, T., McNutt, T., Saleh, H., & Song, D. Y. (2008). Comparison of daily couch shifts using MVCT (TomoTherapy) and B-mode ultrasound (BAT system) during prostate radiotherapy. *Technology in Cancer Research & Treatment*, 7(4), 279-285. *Exclude: Treatment planning*
- Lin, Z., Mechalakos, J., Nehmeh, S., Schoder, H., Lee, N., Humm, J., & Ling, C. C. (2008). The influence of changes in tumor hypoxia on dose-painting treatment plans based on 18F-FMISO positron emission tomography. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1219-1228. *Exclude: Study size*
- Linthout, N., Verellen, D., Van Acker, S., & Storme, G. (2004). A simple theoretical verification of monitor unit calculation for intensity modulated beams using dynamic mini-multileaf collimation. *Radiotherapy & Oncology*, 71(2), 235-241. *Exclude: Treatment planning*
- Lips, I., Dehnad, H., Kruger, A. B., van Moorselaar, J., van der Heide, U., Battermann, J., & van Vulpen, M. (2007). Health-related quality of life in patients with locally advanced prostate cancer after 76 Gy intensity-modulated radiotherapy vs. 70 Gy conformal radiotherapy in a prospective and longitudinal study. *International Journal of Radiation Oncology, Biology, Physics*, 69(3), 656-661. *Exclude: Date*
- Litzenberg, D. W., Moran, J. M., & Fraass, B. A. (2002). Verification of dynamic and segmental IMRT delivery by dynamic log file analysis. *Journal of Applied Clinical Medical Physics*, 3(2), 63-72. *Exclude: Treatment planning*
- Liu, B., Lerma, F. A., Patel, S., Amin, P., Feng, Y., Yi, B. Y., & Yu, C. (2008). Dosimetric effects of the prone and supine positions on image guided localized prostate cancer radiotherapy. *Radiotherapy & Oncology*, 88(1), 67-76. *Exclude: Treatment planning*
- Liu, H. H., Wang, X., Dong, L., Wu, Q., Liao, Z., Stevens, C. W., . . . Mohan, R. (2004). Feasibility of sparing lung and other thoracic structures with intensity-modulated radiotherapy for non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 58(4), 1268-1279. *Exclude: Study size*
- Liu, R., Wagner, T. H., Buatti, J. M., Modrick, J., Dill, J., & Meeks, S. L. (2004). Geometrically based optimization for extracranial radiosurgery. *Physics in Medicine & Biology*, 49(6), 987-996. *Exclude: Treatment planning*

- Liu, S. W., Li, J. M., Chang, J. Y., Yu, J. M., Chen, Q., Jiang, Q. A., . . . Wei, Q. L. (2010). A treatment planning comparison between proton beam therapy and intensity-modulated x-ray therapy for recurrent nasopharyngeal carcinoma. *Journal of X-Ray Science & Technology*, 18(4), 443-450. *Exclude: Study size*
- Liu, W. S., Hsin, C. H., Chou, Y. H., Liu, J. T., Wu, M. F., Tseng, S. W., . . . Lee, H. (2010). Long-term results of intensity-modulated radiotherapy concomitant with chemotherapy for hypopharyngeal carcinoma aimed at laryngeal preservation. *BMC Cancer*, 10, 102. *Exclude: Study size*
- Liu, W. S., Lee, S. P., Lee, J. K., Su, M. C., Chen, G. D., Lee, H. S., & Lee, H. (2006). Factors influencing the parotid function in nasopharyngeal carcinoma treated with parotid-sparing radiotherapy. *Japanese Journal of Clinical Oncology*, 36(10), 626-631. *Exclude: Date*
- Liu, W. S., Su, M. C., Wu, M. F., Tseng, H. C., & Kuo, H. C. (2004). Nasopharyngeal carcinoma treated with precision-oriented radiation therapy techniques including intensity-modulated radiotherapy: Preliminary results. *Kaohsiung Journal of Medical Sciences*, 20(2), 49-55. *Exclude: Study size*
- Livi, L., Buonamici, F. B., Simontacchi, G., Scotti, V., Fambrini, M., Compagnucci, A., . . . Biti, G. (2010). Accelerated partial breast irradiation with IMRT: New technical approach and interim analysis of acute toxicity in a phase III randomized clinical trial. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 509-515. *Exclude: Included in systematic review (Hayes 2012 [partial breast])*
- Livi, L., Paiar, F., Banci-Buonamici, F., Simontacchi, G., Detti, B., Gacci, M., . . . Biti, G. (2006). Localized prostate cancer treated with intensity-modulated radiotherapy. *Tumori*, 92(3), 197-201. *Exclude: Date*
- Llacer, J., Deasy, J. O., Portfeld, T. R., Solberg, T. D., & Promberger, C. (2003). Absence of multiple local minima effects in intensity modulated optimization with dose-volume constraints. *Physics in Medicine & Biology*, 48(2), 183-210. *Exclude: Sample size*
- Locke, J., Low, D. A., Grigireit, T., & Chao, K. S. (2002). Potential of tomotherapy for total scalp treatment. *International Journal of Radiation Oncology, Biology, Physics*, 52(2), 553-559. *Exclude: Sample size*
- Lohr, F., Dobler, B., Mai, S., Hermann, B., Tiefenbacher, U., Wieland, P., . . . Wenz, F. (2003). Optimization of dose distributions for adjuvant locoregional radiotherapy of gastric cancer by IMRT. *Strahlentherapie Und Onkologie*, 179(8), 557-563. *Exclude: Treatment planning*
- Lomax, A. J., Goitein, M., & Adams, J. (2003). Intensity modulation in radiotherapy: Photons versus protons in the paranasal sinus. *Radiotherapy & Oncology*, 66(1), 11-18. *Exclude: Treatment planning*
- Longobardi, B., De Martin, E., Fiorino, C., Dell'oca, I., Broggi, S., Cattaneo, G. M., & Calandrino, R. (2005). Comparing 3DCRT and inversely optimized IMRT planning for head and neck cancer: Equivalence between step-and-shoot and sliding window techniques. *Radiotherapy & Oncology*, 77(2), 148-156. *Exclude: Study size*
- Loo, S. W., Geropantas, K., Beadsmoore, C., Montgomery, P. Q., Martin, W. M., & Roques, T. W. (2011). Neck dissection can be avoided after sequential chemoradiotherapy and negative post-treatment positron emission tomography-computed tomography in N2 head and neck squamous cell carcinoma. *Clinical Oncology (Royal College of Radiologists)*, 23(8), 512-517. *Excluded: Intervention not of interest (PET-CT)*
- Lorenz, E., Strickert, T., & Hagen, B. (2009). Cervical carcinoma: Postoperative radiotherapy: Fifteen-year experience in a norwegian health region. *International Journal of Gynecological Cancer*, 19(9), 1595-1599. *Exclude: Intervention not of interest (does not include IMRT)*
- Lougovski, P., LeNoach, J., Zhu, L., Ma, Y., Censor, Y., & Xing, L. (2010). Toward truly optimal IMRT dose distribution: Inverse planning with voxel-specific penalty. *Technology in Cancer Research & Treatment*, 9(6), 629-636. *Exclude: Treatment planning*
- Louise Kent, M., Brennan, M. T., Noll, J. L., Fox, P. C., Burri, S. H., Hunter, J. C., & Lockhart, P. B. (2008). Radiation-induced trismus in head and neck cancer patients. *Supportive Care in Cancer*, 16(3), 305-309. *Exclude: Date*

- Love, P. A., Evans, P. M., Leach, M. O., & Webb, S. (2003). Polymer gel measurement of dose homogeneity in the breast: Comparing MLC intensity modulation with standard wedged delivery. *Physics in Medicine & Biology*, 48(8), 1065-1074. *Exclude: Treatment planning*
- Low, D. (2003). Compared with inverse-planning, forward planning is preferred for IMRT stereotactic radiosurgery. against the proposition. *Medical Physics*, 30(5), 732-734. *Exclude: Study design (commentary)*
- Low, D. A., Nystrom, M., Kalinin, E., Parikh, P., Dempsey, J. F., Bradley, J. D., . . . Whiting, B. R. (2003). A method for the reconstruction of four-dimensional synchronized CT scans acquired during free breathing. *Medical Physics*, 30(6), 1254-1263. *Exclude: Treatment planning*
- Low, D. A., Parikh, P., Dempsey, J. F., Wahab, S., & Huq, S. (2003). Ionization chamber volume averaging effects in dynamic intensity modulated radiation therapy beams. *Medical Physics*, 30(7), 1706-1711. *Exclude: Treatment planning*
- Lu, H., Peng, L., Yuan, X., Hao, Y., Lu, Z., Chen, J., . . . Qin, J. (2009). Concurrent chemoradiotherapy in locally advanced nasopharyngeal carcinoma: A treatment paradigm also applicable to patients in southeast asia. *Cancer Treatment Reviews*, 35(4), 345-353. *Exclude: Study design (narrative review)*
- Lu, H., & Yao, M. (2008). The current status of intensity-modulated radiation therapy in the treatment of nasopharyngeal carcinoma. *Cancer Treatment Reviews*, 34(1), 27-36. *Exclude: Date*
- Lu, H., Yao, M., Anderson, K., & Buatti, J. (2008). Optically guided stereotactic radiotherapy for lacrimal sac tumors: A report on two cases. *Technology in Cancer Research & Treatment*, 7(1), 35-40. *Exclude: Study size*
- Lu, H., Yao, M., & Tan, H. (2009). Unknown primary head and neck cancer treated with intensity-modulated radiation therapy: To what extent the volume should be irradiated. *Oral Oncology*, 45(6), 474-479. *Exclude: Study size*
- Lu, J. J., Shakespeare, T. P., Thiagarajan, A., Zhang, X., Liang, L., & Tan, S. (2005). Prospective phase II trial of concomitant boost radiotherapy for stage II nasopharyngeal carcinoma: An evaluation of response and toxicity. *Laryngoscope*, 115(5), 806-810. *Exclude: Date*
- Lu, M., Freytag, S. O., Stricker, H., Kim, J. H., Barton, K., & Movsas, B. (2011). Adaptive seamless design for an efficacy trial of replication-competent adenovirus-mediated suicide gene therapy and radiation in newly-diagnosed prostate cancer (ReCAP trial). *Contemporary Clinical Trials*, 32(3), 453-460. *Exclude: Study design (description of clinical trial)*
- Luan, S., Chen, D. Z., Zhang, L., Wu, X., & Yu, C. X. (2003). An optimal algorithm for configuring delivery options of a one-dimensional intensity-modulated beam. *Physics in Medicine & Biology*, 48(15), 2321-2338. *Exclude: Treatment planning*
- Luan, S., Wang, C., Chen, D. Z., Hu, X. S., Naqvi, S. A., Wu, X., & Yu, C. X. (2006). An improved MLC segmentation algorithm and software for step-and-shoot IMRT delivery without tongue-and-groove error. *Medical Physics*, 33(5), 1199-1212. *Exclude: Treatment planning*
- Luan, S., Wang, C., Chen, D. Z., Hu, X. S., Naqvi, S. A., Yu, C. X., & Lee, C. L. (2004). A new MLC segmentation algorithm/software for step-and-shoot IMRT delivery. *Medical Physics*, 31(4), 695-707. *Exclude: Treatment planning*
- Ludlum, E., & Xia, P. (2008). Comparison of IMRT planning with two-step and one-step optimization: A way to simplify IMRT. *Physics in Medicine & Biology*, 53(3), 807-821. *Exclude: Study size*
- Ludwig, V., Schwab, F., Guckenberger, M., Krieger, T., & Flentje, M. (2008). Comparison of wedge versus segmented techniques in whole breast irradiation: Effects on dose exposure outside the treatment volume. *Strahlentherapie Und Onkologie*, 184(6), 307-312. *Exclude: Treatment planning*
- Luo, C., Yang, C. C., Narayan, S., Stern, R. L., Perks, J., Goldberg, Z., . . . Vijayakumar, S. (2006). Use of benchmark dose-volume histograms for selection of the optimal technique between three-dimensional conformal radiation therapy and intensity-modulated radiation therapy in prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 1253-1262. *Exclude: Treatment planning*

- Luo, W., Li, J., Fourkal, E., Fan, J., Xu, X., Chen, Z., . . . Ma, C. M. (2008). Dosimetric advantages of IMPT over IMRT for laser-accelerated proton beams. *Physics in Medicine & Biology*, 53(24), 7151-7166. *Exclude: Treatment planning*
- Ma, C. M., Ding, M., Li, J. S., Lee, M. C., Pawlicki, T., & Deng, J. (2003). A comparative dosimetric study on tangential photon beams, intensity-modulated radiation therapy (IMRT) and modulated electron radiotherapy (MERT) for breast cancer treatment. *Physics in Medicine & Biology*, 48(7), 909-924. *Exclude: Treatment planning*
- Ma, C. M., Jiang, S. B., Pawlicki, T., Chen, Y., Li, J. S., Deng, J., & Boyer, A. L. (2003). A quality assurance phantom for IMRT dose verification. *Physics in Medicine & Biology*, 48(5), 561-572. *Exclude: Treatment planning*
- Ma, C. M., Price, R. A., Jr, Li, J. S., Chen, L., Wang, L., Fourkal, E., . . . Yang, J. (2004). Monitor unit calculation for monte carlo treatment planning. *Physics in Medicine & Biology*, 49(9), 1671-1687. *Exclude: Treatment planning*
- Ma, L., Kwok, Y., Chin, L. S., Yu, C., & Regine, W. F. (2005). Comparative analyses of linac and gamma knife radiosurgery for trigeminal neuralgia treatments. *Physics in Medicine & Biology*, 50(22), 5217-5227. *Exclude: Treatment planning*
- Ma, L., Sahgal, A., Cozzi, L., Chang, E., Shiu, A., Letourneau, D., . . . Larson, D. A. (2010). Apparatus-dependent dosimetric differences in spine stereotactic body radiotherapy. *Technology in Cancer Research & Treatment*, 9(6), 563-574. *Exclude: Treatment planning*
- Ma, Y., Li, M., Yin, Y., Kong, L., Sun, X., Lin, X., & Yu, J. (2010). Hypofractionated stereotactic radiotherapy for brain metastases: A dosimetric and treatment efficiency comparison between volumetric modulated arc therapy and intensity modulated radiotherapy. *Technology in Cancer Research & Treatment*, 9(5), 499-507. *Exclude: Study size*
- Macdonald, D. M., Lin, L. L., Biehl, K., Mutic, S., Nantz, R., & Grigsby, P. W. (2008). Combined intensity-modulated radiation therapy and brachytherapy in the treatment of cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 618-624. *Exclude: Study size*
- MacDonald, S. M., Ahmad, S., Kachris, S., Vogds, B. J., DeRouen, M., Gittleman, A. E., . . . Vlachaki, M. T. (2007). Intensity modulated radiation therapy versus three-dimensional conformal radiation therapy for the treatment of high grade glioma: A dosimetric comparison. *Journal of Applied Clinical Medical Physics*, 8(2), 47-60. *Exclude: Treatment planning*
- MacDonald, S. M., Safai, S., Trofimov, A., Wolfgang, J., Fullerton, B., Yeap, B. Y., . . . Yock, T. (2008). Proton radiotherapy for childhood ependymoma: Initial clinical outcomes and dose comparisons. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 979-986. *Exclude: Comparator not of interest (proton radiotherapy)*
- MacDonald, S. M., Trofimov, A., Safai, S., Adams, J., Fullerton, B., Ebb, D., . . . Yock, T. I. (2011). Proton radiotherapy for pediatric central nervous system germ cell tumors: Early clinical outcomes. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 121-129. *Exclude: Comparator not of interest (3D-CPT and IM proton therapy)*
- Maceira Rozas Mdel, C., Rey Liste, T., Garcia Caeiro, A. L., & Garcia Comesana, J. (2006). Recommendations for treatment with IMRT for prostate and head-neck cancer. *axencia de avaliacion de tecnoloxias sanitarias de galicia. Clinical & Translational Oncology: Official Publication of the Federation of Spanish Oncology Societies & of the National Cancer Institute of Mexico*, 8(4), 262-265.
- Macias, V. (2004). CTV margins in prostate cancer irradiation. in regard to teh et al.: IMRT for prostate cancer: Defining target volume based on correlated pathologic volume of disease (int J radiat oncol biol phys 2003;56:184-191). *International Journal of Radiation Oncology, Biology, Physics*, 59(1), 320-321. *Exclude: Study design (letter)*



- Mack, A., Mack, G., Weltz, D., Scheib, S. G., Bottcher, H. D., & Seifert, V. (2003). High precision film dosimetry with GAFCHROMIC films for quality assurance especially when using small fields. *Medical Physics*, 30(9), 2399-2409. *Exclude: Treatment planning*
- MacKay, R. I., Staffurth, J., Poynter, A., Routsis, D., & Radiotherapy Development, B. (2010). UK guidelines for the safe delivery of intensity-modulated radiotherapy. *Clinical Oncology (Royal College of Radiologists)*, 22(8), 629-635.
- Mackie, T. R., Kapatoes, J., Ruchala, K., Lu, W., Wu, C., Olivera, G., . . . Mehta, M. (2003). Image guidance for precise conformal radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 89-105. *Exclude: Treatment planning*
- Madani, I., Bonte, K., Vakaet, L., Boterberg, T., & De Neve, W. (2009). Intensity-modulated radiotherapy for sinonasal tumors: Ghent university hospital update. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 424-432. *Exclude: Date*
- Madani, I., Vakaet, L., Bonte, K., Boterberg, T., & De Neve, W. (2008). Intensity-modulated radiotherapy for cervical lymph node metastases from unknown primary cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1158-1166. *Exclude: Study size*
- Madani, I., Vanderstraeten, B., Bral, S., Coghe, M., De Gerssem, W., De Wagter, C., . . . De Neve, W. (2007). Comparison of 6 MV and 18 MV photons for IMRT treatment of lung cancer. *Radiotherapy & Oncology*, 82(1), 63-69. *Exclude: Study size*
- Mahantshetty, U., Jamema, S., Engineer, R., Deshpande, D., Sarin, R., Fogliata, A., . . . Cozzi, L. (2010). Whole abdomen radiation therapy in ovarian cancers: A comparison between fixed beam and volumetric arc based intensity modulation. *Radiation Oncology*, 5, 106. *Exclude: Study size*
- Manon, R. R., Jaradat, H., Patel, R., Zhang, T., Fenwick, J., Tome, W., . . . Mehta, M. (2005). Potential for radiation therapy technology innovations to permit dose escalation for non-small-cell lung cancer. *Clinical Lung Cancer*, 7(2), 107-113. *Exclude: Study size*
- Mansur, D. B., Klein, E. E., & Maserang, B. P. (2007). Measured peripheral dose in pediatric radiation therapy: A comparison of intensity-modulated and conformal techniques. *Radiotherapy & Oncology*, 82(2), 179-184. *Exclude: Study size*
- Marnitz, S., Lukarski, D., Kohler, C., Wlodarczyk, W., Ebert, A., Budach, V., . . . Stromberger, C. (2011). Helical tomotherapy versus conventional intensity-modulated radiation therapy for primary chemoradiation in cervical cancer patients: An intraindividual comparison. *International Journal of Radiation Oncology, Biology, Physics*, 81(2), 424-430. *Exclude: Treatment planning*
- Marnitz, S., Stuschke, M., Bohsung, J., Moys, A., Reng, I., Wurm, R., & Budach, V. (2002). Intraindividual comparison of conventional three-dimensional radiotherapy and intensity modulated radiotherapy in the therapy of locally advanced non-small cell lung cancer a planning study. *Strahlentherapie Und Onkologie*, 178(11), 651-658. *Exclude: Sample size*
- Martens, C., Reynaert, N., De Wagter, C., Nilsson, P., Coghe, M., Palmans, H., . . . De Neve, W. (2002). Underdosage of the upper-airway mucosa for small fields as used in intensity-modulated radiation therapy: A comparison between radiochromic film measurements, monte carlo simulations, and collapsed cone convolution calculations. *Medical Physics*, 29(7), 1528-1535. *Exclude: Treatment planning*
- Martin, J., Rodrigues, G., Malone, S., Morton, G., Campbell, H., & Crook, J. (2006). Changing management of localized prostate cancer: A comparison survey of ontario radiation oncologists. *Canadian Journal of Urology*, 13(Suppl 2), 26-33. *Exclude: Study size*
- Martin, J. M., Bayley, A., Bristow, R., Chung, P., Gospodarowicz, M., Menard, C., . . . Catton, C. N. (2009). Image guided dose escalated prostate radiotherapy: Still room to improve. *Radiation Oncology*, 4, 50. *Exclude: Outcomes not specific to IMRT*

- Martin, J. M., Rosewall, T., Bayley, A., Bristow, R., Chung, P., Crook, J., . . . Catton, C. (2007). Phase II trial of hypofractionated image-guided intensity-modulated radiotherapy for localized prostate adenocarcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 69(4), 1084-1089. *Exclude: Results discussed in more recent article*
- Martin, S., Chen, J. Z., Rashid Dar, A., & Yartsev, S. (2011). Dosimetric comparison of helical tomotherapy, RapidArc, and a novel IMRT & arc technique for esophageal carcinoma. *Radiotherapy & Oncology*, 101(3), 431-437. *Exclude: Study size*
- Martinez, A. A., Demanes, J., Vargas, C., Schour, L., Ghilezan, M., & Gustafson, G. S. (2010). High-dose-rate prostate brachytherapy: An excellent accelerated-hypofractionated treatment for favorable prostate cancer. *American Journal of Clinical Oncology*, 33(5), 481-488. *Exclude: Intervention not of interest (brachytherapy)*
- Marzi, S., Iaccarino, G., Pasciuti, K., Soriani, A., Benassi, M., Arcangeli, G., . . . Marucci, L. (2009). Analysis of salivary flow and dose-volume modeling of complication incidence in patients with head-and-neck cancer receiving intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 73(4), 1252-1259. *Exclude: Date*
- Matuszak, M. M., Yan, D., Grills, I., & Martinez, A. (2010). Clinical applications of volumetric modulated arc therapy. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 608-616. *Exclude: Study size*
- Matzinger, O., Duclos, F., van den Bergh, A., Carrie, C., Villa, S., Kitsios, P., . . . EORTC Radiation Oncology, G. (2009). Acute toxicity of curative radiotherapy for intermediate- and high-risk localised prostate cancer in the EORTC trial 22991. *European Journal of Cancer*, 45(16), 2825-2834. *Exclude: Included in De Neve (2012)*
- Matzinger, O., Poortmans, P., Giraud, J. Y., Maingon, P., Budiharto, T., van den Bergh, A. C., . . . EORTC Radiation Oncology, G. (2009). Quality assurance in the 22991 EORTC ROG trial in localized prostate cancer: Dummy run and individual case review. *Radiotherapy & Oncology*, 90(3), 285-290. *Exclude: Treatment planning*
- Maurer, J., Hipp, M., Schafer, C., & Kolbl, O. (2011). Dysphagia. impact on quality of life after radio(chemo)therapy of head and neck cancer. *Strahlentherapie Und Onkologie*, 187(11), 744-749. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=medl&AN=22037655> *Exclude: Study size*
- Mavroidis, P., Costa Ferreira, B., Shi, C., Lind, B. K., & Papanikolaou, N. (2008). Comparison of the 3D-conformal, helical tomotherapy and multileaf collimators-based intensity modulated radiotherapy modalities using radiobiological measures. *Journal of B.U.on*, 13(1), 75-86. *Exclude: Treatment planning*
- Mavroidis, P., Ferreira, B. C., Papanikolaou, N., Svensson, R., Kappas, C., Lind, B. K., & Brahme, A. (2006). Assessing the difference between planned and delivered intensity-modulated radiotherapy dose distributions based on radiobiological measures. *Clinical Oncology (Royal College of Radiologists)*, 18(7), 529-538. *Exclude: Treatment planning*
- Mavroidis, P., Ferreira, B. C., Shi, C., Delichas, M. G., Lind, B. K., & Papanikolaou, N. (2009). Comparison of the helical tomotherapy and MLC-based IMRT radiation modalities in treating brain and cranio-spinal tumors. *Technology in Cancer Research & Treatment*, 8(1), 3-14. *Exclude: Treatment planning*
- Mavroidis, P., Ferreira, B. C., Shi, C., Lind, B. K., & Papanikolaou, N. (2007). Treatment plan comparison between helical tomotherapy and MLC-based IMRT using radiobiological measures. *Physics in Medicine & Biology*, 52(13), 3817-3836. *Exclude: Treatment planning*
- Mavroidis, P., Shi, C., Plataniotis, G. A., Delichas, M. G., Ferreira, B. C., Rodriguez, S., . . . Papanikolaou, N. (2011). Comparison of the helical tomotherapy against the multileaf collimator-based intensity-modulated radiotherapy and 3D conformal radiation modalities in lung cancer radiotherapy. *British Journal of Radiology*, 84(998), 161-172. *Exclude: Study size*
- Mayo, C., Lo, Y. C., Fitzgerald, T. J., & Urie, M. (2004). Forward-planned, multiple-segment, tangential fields with concomitant boost in the treatment of breast cancer. *Medical Dosimetry*, 29(4), 265-270. *Exclude: Date*

- Mayo, C. S., & Urie, M. M. (2003). A systematic benchmark method for analysis and comparison of IMRT treatment planning algorithms. *Medical Dosimetry*, 28(4), 235-242. *Exclude: Treatment planning*
- Mayo, C. S., Urie, M. M., & Fitzgerald, T. J. (2005). Hybrid IMRT plans--concurrently treating conventional and IMRT beams for improved breast irradiation and reduced planning time. *International Journal of Radiation Oncology, Biology, Physics*, 61(3), 922-932. *Exclude: Study size*
- Mayo, C. S., Urie, M. M., Fitzgerald, T. J., Ding, L., Lo, Y. C., & Bogdanov, M. (2008). Hybrid IMRT for treatment of cancers of the lung and esophagus. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1408-1418. *Exclude: Study size*
- McBain, C. A., Henry, A. M., Sykes, J., Amer, A., Marchant, T., Moore, C. M., . . . Price, P. (2006). X-ray volumetric imaging in image-guided radiotherapy: The new standard in on-treatment imaging. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 625-634. *Exclude: Treatment planning*
- McCammon, R., Rusthoven, K. E., Kavanagh, B., Newell, S., Newman, F., & Raben, D. (2009). Toxicity assessment of pelvic intensity-modulated radiotherapy with hypofractionated simultaneous integrated boost to prostate for intermediate- and high-risk prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 75(2), 413-420. *Exclude: Study size*
- McCloskey, S. A., Jaggernauth, W., Rigual, N. R., Hicks, W. L., Jr, Popat, S. R., Sullivan, M., . . . Singh, A. K. (2009). Radiation treatment interruptions greater than one week and low hemoglobin levels (12 g/dL) are predictors of local regional failure after definitive concurrent chemotherapy and intensity-modulated radiation therapy for squamous cell carcinoma of the head and neck. *American Journal of Clinical Oncology*, 32(6), 587-591. *Exclude: Outcome not of interest (locoregional failure)*
- McDermott, P. N., He, T., & DeYoung, A. (2003). Dose calculation accuracy of lung planning with a commercial IMRT treatment planning system. *Journal of Applied Clinical Medical Physics*, 4(4), 341-351. *Exclude: Treatment planning*
- McDonald, M. W., Esiashvili, N., George, B. A., Katzenstein, H. M., Olson, T. A., Rapkin, L. B., & Marcus, R. B., Jr. (2008). Intensity-modulated radiotherapy with use of cone-down boost for pediatric head-and-neck rhabdomyosarcoma. *International Journal of Radiation Oncology, Biology, Physics*, 72(3), 884-891. *Exclude: Date*
- McDonald, M. W., Godette, K. D., Butker, E. K., Davis, L. W., & Johnstone, P. A. (2008). Long-term outcomes of IMRT for breast cancer: A single-institution cohort analysis. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1031-1040. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- McDonald, M. W., Godette, K. D., Whitaker, D. J., Davis, L. W., & Johnstone, P. A. (2010). Three-year outcomes of breast intensity-modulated radiation therapy with simultaneous integrated boost. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 523-530. *Exclude: Included in systematic review (Hayes 2012)*
- McGarry, C. K., Butterworth, K. T., Trainor, C., O'Sullivan, J. M., Prise, K. M., & Hounsell, A. R. (2011). Temporal characterization and in vitro comparison of cell survival following the delivery of 3D-conformal, intensity-modulated radiation therapy (IMRT) and volumetric modulated arc therapy (VMAT). *Physics in Medicine & Biology*, 56(8), 2445-2457. *Exclude: Treatment planning*
- McGibney, C., Holmberg, O., McClean, B., & Armstrong, J. (2003). Analysis of dose distribution in the 'rind'--a volume outside the PTV--in 3-dimensional conformal radiation therapy of non-small cell lung cancer. *Radiotherapy & Oncology*, 66(1), 87-93. *Exclude: Sample size*
- McGrath, S. D., Matuszak, M. M., Yan, D., Kestin, L. L., Martinez, A. A., & Grills, I. S. (2010). Volumetric modulated arc therapy for delivery of hypofractionated stereotactic lung radiotherapy: A dosimetric and treatment efficiency analysis. *Radiotherapy & Oncology*, 95(2), 153-157. *Exclude: Treatment planning*
- McGuire, S. M., Marks, L. B., Yin, F. F., & Das, S. K. (2010). A methodology for selecting the beam arrangement to reduce the intensity-modulated radiation therapy (IMRT) dose to the SPECT-defined functioning lung. *Physics in Medicine & Biology*, 55(2), 403-416. *Exclude: Treatment planning*

- McIntosh, A., Read, P. W., Khandelwal, S. R., Arthur, D. W., Turner, A. B., Ruchala, K. J., . . . Sheng, K. (2008). Evaluation of coplanar partial left breast irradiation using tomotherapy-based tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 603-610. *Exclude: Study size*
- McKerracher, C., & Thwaites, D. I. (2007). Head scatter factors for small MV photon fields. part I: A comparison of phantom types and methodologies. *Radiotherapy & Oncology*, 85(2), 277-285. *Exclude: Treatment planning*
- McLaughlin, E. J., Heuer, G. G., Whitmore, R. G., Birknes, J. K., Belasco, J., Sterman, D., . . . Storm, P. B. (2011). Treatment of a malignant peripheral nerve sheath tumor and its complications through a multidisciplinary approach. *Journal of Neurosurgery.Pediatrics*, 7(5), 543-548. *Exclude: Study size*
- McLaughlin, P. W., Narayana, V., Meirovitz, A., Troyer, S., Roberson, P. L., Gonda, R., Jr., . . . Kessler, M. (2005). Vessel-sparing prostate radiotherapy: Dose limitation to critical erectile vascular structures (internal pudendal artery and corpus cavernosum) defined by MRI. *International Journal of Radiation Oncology, Biology, Physics*, 61(1), 20-31. *Exclude: Treatment planning*
- McLean, J. N., Nunley, S. R., Klass, C., Moore, C., Muller, S., & Johnstone, P. A. (2007). Combined modality therapy of esthesioneuroblastoma. *Otolaryngology - Head & Neck Surgery*, 136(6), 998-1002. *Exclude: Study size*
- McMillan, A. S., Pow, E. H., Kwong, D. L., Wong, M. C., Sham, J. S., Leung, L. H., & Leung, W. K. (2006). Preservation of quality of life after intensity-modulated radiotherapy for early-stage nasopharyngeal carcinoma: Results of a prospective longitudinal study. *Head & Neck*, 28(8), 712-722. *Exclude: Date*
- Mechalakos, J., St Germain, J., & Burman, C. M. (2004). Results of a one year survey of output for linear accelerators using IMRT and non-IMRT techniques. *Journal of Applied Clinical Medical Physics*, 5(1), 64-72. *Exclude: Treatment planning*
- Meedt, G., Alber, M., & Nusslin, F. (2003). Non-coplanar beam direction optimization for intensity-modulated radiotherapy. *Physics in Medicine & Biology*, 48(18), 2999-3019. *Exclude: Treatment planning*
- Meirovitz, A., Murdoch-Kinch, C. A., Schipper, M., Pan, C., & Eisbruch, A. (2006). Grading xerostomia by physicians or by patients after intensity-modulated radiotherapy of head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 66(2), 445-453. *Exclude: Date*
- Melancon, A. D., O'Daniel, J. C., Zhang, L., Kudchadker, R. J., Kuban, D. A., Lee, A. K., . . . Dong, L. (2007). Is a 3-mm intrafractional margin sufficient for daily image-guided intensity-modulated radiation therapy of prostate cancer?. *Radiotherapy & Oncology*, 85(2), 251-259. *Exclude: Date*
- Mell, L. K., Schomas, D. A., Salama, J. K., Devisetty, K., Aydogan, B., Miller, R. C., . . . Chmura, S. J. (2008). Association between bone marrow dosimetric parameters and acute hematologic toxicity in anal cancer patients treated with concurrent chemotherapy and intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 70(5), 1431-1437. *Exclude: Study size (harms)*
- Mell, L. K., Tiryaki, H., Ahn, K. H., Mundt, A. J., Roeske, J. C., & Aydogan, B. (2008). Dosimetric comparison of bone marrow-sparing intensity-modulated radiotherapy versus conventional techniques for treatment of cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1504-1510. *Exclude: Study size*
- Mendenhall, W. M., Amdur, R. J., & Palta, J. R. (2006). Intensity-modulated radiotherapy in the standard management of head and neck cancer: Promises and pitfalls. *Journal of Clinical Oncology*, 24(17), 2618-2623. *Exclude: Study design (narrative review)*
- Mendenhall, W. M., Morris, C. G., Amdur, R. J., Hinerman, R. W., Malyapa, R. S., Werning, J. W., . . . Villaret, D. B. (2006). Definitive radiotherapy for tonsillar squamous cell carcinoma. *American Journal of Clinical Oncology*, 29(3), 290-297. *Exclude: Date*
- Mendenhall, W. M., Morris, C. G., Hinerman, R. W., Malyapa, R. S., & Amdur, R. J. (2006). Definitive radiotherapy for nasopharyngeal carcinoma. *American Journal of Clinical Oncology*, 29(6), 622-627. *Exclude: Date*

- Mendes, R., Lavrenkov, K., Bedford, J. L., Henrys, A., Ashley, S., & Brada, M. (2006). Comparison of forward planning with automated inverse planning for three-dimensional conformal radiotherapy of non-small cell lung cancer without IMRT. *Radiotherapy & Oncology*, 78(3), 322-325. *Exclude: Study size*
- Meng, L. L., Feng, L. C., Wang, Y. L., Dai, X. K., & Xie, C. B. (2011). Dosimetric comparison between helical tomotherapy and intensity-modulated radiation therapy plans for non-small cell lung cancer. *Chinese Medical Journal*, 124(11), 1667-1671. *Exclude: Study size*
- Menhel, J., Levin, D., Alezra, D., Symon, Z., & Pfeffer, R. (2006). Assessing the quality of conformal treatment planning: A new tool for quantitative comparison. *Physics in Medicine & Biology*, 51(20), 5363-5375. *Exclude: Treatment planning*
- Metwaly, M., Awaad, A. M., El-Sayed, e. M., & Sallam, A. S. (2008). Comparison of intensity-modulated radiotherapy and forward-planning dynamic arc therapy techniques for prostate cancer. *Journal of Applied Clinical Medical Physics*, 9(4), 2783. *Exclude: Treatment planning*
- Miao, B., Jeraj, R., Bao, S., & Mackie, T. R. (2003). Adaptive anisotropic diffusion filtering of monte carlo dose distributions. *Physics in Medicine & Biology*, 48(17), 2767-2781. *Exclude: Treatment planning*
- Michalski, J. M., Gay, H., Jackson, A., Tucker, S. L., & Deasy, J. O. (2010). Radiation dose-volume effects in radiation-induced rectal injury. *International Journal of Radiation Oncology, Biology, Physics*, 76(3 Suppl), S123-9. *Exclude: Treatment planning*
- Mihai, A., Rakovitch, E., Sixel, K., Woo, T., Cardoso, M., Bell, C., . . . Pignol, J. P. (2005). Inverse vs. forward breast IMRT planning. *Medical Dosimetry*, 30(3), 149-154. *Exclude: Date*
- Mihailidis, D. N., Plants, B., Farinash, L., Harmon, M., Whaley, L., Raja, P., & Tomara, P. (2010). Superiority of equivalent uniform dose (EUD)-based optimization for breast and chest wall. *Medical Dosimetry*, 35(1), 67-76. *Exclude: Study size*
- Mihaylov, I. B., Fatyga, M., Bzdusek, K., Gardner, K., & Moros, E. G. (2012). Biological optimization in volumetric modulated arc radiotherapy for prostate carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), 1292-1298. *Exclude: Study size*
- Mihaylov, I. B., Fatyga, M., Moros, E. G., Penagaricano, J., & Lerma, F. A. (2010). Lung dose for minimally moving thoracic lesions treated with respiration gating. *International Journal of Radiation Oncology, Biology, Physics*, 77(1), 285-291. *Exclude: Study size*
- Mihaylov, I. B., Penagaricano, J., & Moros, E. G. (2009). Quantification of the skin sparing effect achievable with high-energy photon beams when carbon fiber tables are used. *Radiotherapy & Oncology*, 93(1), 147-152. *Exclude: Study size*
- Milano, M. T., Garofalo, M. C., Chmura, S. J., Farrey, K., Rash, C., Heimann, R., & Jani, A. B. (2006). Intensity-modulated radiation therapy in the treatment of gastric cancer: Early clinical outcome and dosimetric comparison with conventional techniques. *British Journal of Radiology*, 79(942), 497-503. *Exclude: Study size (harms)*
- Milby, A. B., Both, S., Ingram, M., & Lin, L. L. (2012). Dosimetric comparison of combined intensity-modulated radiotherapy (IMRT) and proton therapy versus IMRT alone for pelvic and para-aortic radiotherapy in gynecologic malignancies. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), e477-84. *Exclude: Study size*
- Miles, E. A., Clark, C. H., Urbano, M. T., Bidmead, M., Dearnaley, D. P., Harrington, K. J., . . . Nutting, C. M. (2005). The impact of introducing intensity modulated radiotherapy into routine clinical practice. *Radiotherapy & Oncology*, 77(3), 241-246. *Exclude: Treatment planning*
- Mock, U., Bogner, J., Georg, D., Auberger, T., & Potter, R. (2005). Comparative treatment planning on localized prostate carcinoma conformal photon- versus proton-based radiotherapy. *Strahlentherapie Und Onkologie*, 181(7), 448-455. *Exclude: Study size*

- Mock, U., Georg, D., Bogner, J., Auberger, T., & Potter, R. (2004). Treatment planning comparison of conventional, 3D conformal, and intensity-modulated photon (IMRT) and proton therapy for paranasal sinus carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 58(1), 147-154. *Exclude: Study size*
- Moeller, B. J., Rana, V., Cannon, B. A., Williams, M. D., Sturgis, E. M., Ginsberg, L. E., . . . Schwartz, D. L. (2010). Prospective imaging assessment of mortality risk after head-and-neck radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 78(3), 667-674. *Exclude: Intervention not of interest (CT and FDG-PET/CT as mortality risk assessment)*
- Mohammed, N., Kestin, L., Ghilezan, M., Krauss, D., Vicini, F., Brabbins, D., . . . Martinez, A. (2012). Comparison of acute and late toxicities for three modern high-dose radiation treatment techniques for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 82(1), 204-212. *Exclude: Interventions not of interest (EB-IGRT, BT, EBRT+HDR)*
- Moiseenko, V., Banath, J. P., Duzenli, C., & Olive, P. L. (2008). Effect of prolonging radiation delivery time on retention of gammaH2AX. *Radiation Oncology*, 3, 18. *Exclude: Treatment planning*
- Moller, D. S., Khalil, A. A., Knap, M. M., Muren, L. P., & Hoffmann, L. (2011). A planning study of radiotherapy dose escalation of PET-active tumour volumes in non-small cell lung cancer patients. *Acta Oncologica*, 50(6), 883-888. *Exclude: Study size*
- Moman, M. R., van der Heide, U. A., Kotte, A. N., van Moorselaar, R. J., Bol, G. H., Franken, S. P., & van Vulpen, M. (2010). Long-term experience with transrectal and transperineal implantations of fiducial gold markers in the prostate for position verification in external beam radiotherapy; feasibility, toxicity and quality of life. *Radiotherapy & Oncology*, 96(1), 38-42. *Exclude: Intervention not of interest (fiducial markers)*
- Monroe, A. T., Reddy, S. C., Gibbs, G. L., White, G. A., & Peddada, A. V. (2008). Factors associated with radiation-induced nausea and vomiting in head and neck cancer patients treated with intensity modulated radiation therapy. *Radiotherapy & Oncology*, 87(2), 188-194. *Exclude: Date*
- Montejo, M. E., Shrieve, D. C., Bentz, B. G., Hunt, J. P., Buchman, L. O., Agarwal, N., & Hitchcock, Y. J. (2011). IMRT with simultaneous integrated boost and concurrent chemotherapy for locoregionally advanced squamous cell carcinoma of the head and neck. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), e845-52. *Exclude: Study size*
- Moon, S. H., Shin, K. H., Kim, T. H., Yoon, M., Park, S., Lee, D. H., . . . Cho, K. H. (2009). Dosimetric comparison of four different external beam partial breast irradiation techniques: Three-dimensional conformal radiotherapy, intensity-modulated radiotherapy, helical tomotherapy, and proton beam therapy. *Radiotherapy & Oncology*, 90(1), 66-73. *Exclude: Included in systematic review (Hayes 2012 [partial breast])*
- Moore, J. A., Gordon, J. J., Anscher, M. S., & Siebers, J. V. (2009). Comparisons of treatment optimization directly incorporating random patient setup uncertainty with a margin-based approach. *Medical Physics*, 36(9), 3880-3890. *Exclude: Treatment planning*
- Moore, K. L., Brame, R. S., Low, D. A., & Mutic, S. (2011). Experience-based quality control of clinical intensity-modulated radiotherapy planning. *International Journal of Radiation Oncology, Biology, Physics*, 81(2), 545-551. *Exclude: Treatment planning*
- Morales-Paliza, M. A., Coffey, C. W., & Ding, G. X. (2011). Evaluation of the dynamic conformal arc therapy in comparison to intensity-modulated radiation therapy in prostate, brain, head-and-neck and spine tumors. *Journal of Applied Clinical Medical Physics*, 12(2), 3197. *Exclude: Study size*
- Moran, B. J., DeRose, P., Hsu, I. C., Abdel-Wahab, M., Arterbery, V. E., Ciezki, J. P., . . . Merrick, G. S. (2011). ACR appropriateness criteria[REGISTERED] definitive external beam irradiation in stage T1 and T2 prostate cancer. *American Journal of Clinical Oncology*, 34(6), 636-647. *Exclude: Study design (narrative review)*

- Moran, J. M., Ben-David, M. A., Marsh, R. B., Balter, J. M., Griffith, K. A., Hayman, J. A., & Pierce, L. J. (2009). Accelerated partial breast irradiation: What is dosimetric effect of advanced technology approaches?. *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 294-301. *Exclude: Study size*
- Morganti, A. G., Balducci, M., Salvati, M., Esposito, V., Romanelli, P., Ferro, M., . . . Cantore, G. P. (2010). A phase I dose-escalation study (ISIDE-BT-1) of accelerated IMRT with temozolomide in patients with glioblastoma. *International Journal of Radiation Oncology, Biology, Physics*, 77(1), 92-97. *Exclude: Study size*
- Morganti, A. G., Cilla, S., Valentini, V., Digesu, C., Macchia, G., Deodato, F., . . . Scambia, G. (2009). Phase I-II studies on accelerated IMRT in breast carcinoma: Technical comparison and acute toxicity in 332 patients. *Radiotherapy & Oncology*, 90(1), 86-92. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- Morris, E. B., Li, C., Khan, R. B., Sanford, R. A., Boop, F., Pinlac, R., . . . Merchant, T. E. (2009). Evolution of neurological impairment in pediatric infratentorial ependymoma patients. *Journal of Neuro-Oncology*, 94(3), 391-398. *Exclude: Outcomes not specific to IMRT*
- Mowry, S. E., Tang, C., Sadeghi, A., & Wang, M. B. (2010). Standard chemoradiation versus intensity-modulated chemoradiation: A quality of life assessment in oropharyngeal cancer patients. *European Archives of Otorhino-Laryngology*, 267(7), 1111-1116. *Exclude: Study size (harms)*
- Mu, G., Ludlum, E., & Xia, P. (2008). Impact of MLC leaf position errors on simple and complex IMRT plans for head and neck cancer. *Physics in Medicine & Biology*, 53(1), 77-88. *Exclude: Study size*
- Mu, X., Bjork-Eriksson, T., Nill, S., Oelfke, U., Johansson, K. A., Gagliardi, G., . . . Zackrisson, D. B. (2005). Does electron and proton therapy reduce the risk of radiation induced cancer after spinal irradiation for childhood medulloblastoma? A comparative treatment planning study. *Acta Oncologica*, 44(6), 554-562. *Exclude: Treatment planning*
- Mu, X., Olofsson, L., Karlsson, M., Sjogren, R., & Zackrisson, B. (2004). Can photon IMRT be improved by combination with mixed electron and photon techniques?. *Acta Oncologica*, 43(8), 727-735. *Exclude: Treatment planning*
- Mueller, C. K., Thorwarth, M., & Schultze-Mosgau, S. (2010). Late changes in cutaneous gene expression patterns after adjuvant treatment of oral squamous cell carcinoma (OSCC) by radiation therapy. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology & Endodontics*, 109(5), 694-699. *Exclude: Outcome not of interest (late changes in gene expression)*
- Muirhead, R., McNee, S. G., Featherstone, C., Moore, K., & Muscat, S. (2008). Use of maximum intensity projections (MIPs) for target outlining in 4DCT radiotherapy planning. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*, 3(12), 1433-1438. *Exclude: Study size*
- Munden, R. F., Erasmus, J. J., Smythe, W. R., Madewell, J. E., Forster, K. M., & Stevens, C. W. (2005). Radiation injury to the liver after intensity-modulated radiation therapy in patients with mesothelioma: An unusual CT appearance. *AJR. American Journal of Roentgenology*, 184(4), 1091-1095. *Exclude: Intervention not of interest (CT)*
- Munshi, A., Pai, R. H., Phurailatpam, R., Budrukkar, A., Jalali, R., Sarin, R., . . . Dinshaw, K. A. (2009). Do all patients of breast carcinoma need 3-dimensional CT-based planning? A dosimetric study comparing different breast sizes. *Medical Dosimetry*, 34(2), 140-144. *Exclude: Treatment planning*
- Munter, M. W., Debus, J., Hof, H., Nill, S., Haring, P., Bortfeld, T., & Wannemacher, M. (2002). Inverse treatment planning and stereotactic intensity-modulated radiation therapy (IMRT) of the tumor and lymph node levels for nasopharyngeal carcinomas. description of treatment technique, plan comparison, and case study. *Strahlentherapie Und Onkologie*, 178(9), 517-523. *Exclude: Treatment planning*
- Munter, M. W., Hoffner, S., Hof, H., Herfarth, K. K., Haberkorn, U., Rudat, V., . . . Karger, C. P. (2007). Changes in salivary gland function after radiotherapy of head and neck tumors measured by quantitative pertechnetate scintigraphy: Comparison of intensity-modulated radiotherapy and conventional radiation therapy with and

- without amifostine. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 651-659. *Exclude: Date*
- Munter, M. W., Nill, S., Thilmann, C., Hof, H., Hoss, A., Haring, P., . . . Debus, J. (2003). Stereotactic intensity-modulated radiation therapy (IMRT) and inverse treatment planning for advanced pleural mesothelioma. feasibility and initial results. *Strahlentherapie Und Onkologie*, 179(8), 535-541. *Exclude: Sample size*
- Munter, M. W., Schulz-Ertner, D., Hof, H., Nikoghosyan, A., Jensen, A., Nill, S., . . . Debus, J. (2006). Inverse planned stereotactic intensity modulated radiotherapy (IMRT) in the treatment of incompletely and completely resected adenoid cystic carcinomas of the head and neck: Initial clinical results and toxicity of treatment. *Radiation Oncology*, 1, 17. *Exclude: Date*
- Murata, Y., Zhang, L., Ishida, R., Aung, W., Taura, S., Hossain, M., . . . Shibuya, H. (2002). Maintained salivary function after brachytherapy in patients with head and neck carcinomas--evaluation using quantitative salivary gland scintigraphy. *Acta Oncologica*, 41(7-8), 684-688. *Exclude: Date*
- Murshed, H., Liu, H. H., Liao, Z., Barker, J. L., Wang, X., Tucker, S. L., . . . Mohan, R. (2004). Dose and volume reduction for normal lung using intensity-modulated radiotherapy for advanced-stage non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 58(4), 1258-1267. *Exclude: Treatment planning*
- Murthy, V., Gupta, T., Kadam, A., Ghosh-Laskar, S., Budrukkar, A., Phurailatpam, R., . . . Agarwal, J. (2009). Time trial: A prospective comparative study of the time-resource burden for three-dimensional conformal radiotherapy and intensity-modulated radiotherapy in head and neck cancers. *Journal of Cancer Research & Therapeutics*, 5(2), 107-112. *Exclude: Treatment planning*
- Murthy, V., Mallik, S., Master, Z., Sharma, P. K., Mahantshetty, U., & Shrivastava, S. K. (2011). Does helical tomotherapy improve dose conformity and normal tissue sparing compared to conventional IMRT? A dosimetric comparison in high risk prostate cancer. *Technology in Cancer Research & Treatment*, 10(2), 179-185. *Exclude: Treatment planning*
- Murthy, V., Master, Z., Gupta, T., Ghosh-Laskar, S., Budrukkar, A., Phurailatpam, R., & Agarwal, J. (2010). Helical tomotherapy for head and neck squamous cell carcinoma: Dosimetric comparison with linear accelerator-based step-and-shoot IMRT. *Journal of Cancer Research & Therapeutics*, 6(2), 194-198. *Exclude: Study size*
- Muzik, J., Soukup, M., & Alber, M. (2008). Comparison of fixed-beam IMRT, helical tomotherapy, and IMPT for selected cases. *Medical Physics*, 35(4), 1580-1592. *Exclude: Study size*
- Myers, L. L., Sumer, B. D., Truelson, J. M., Nedzi, L., Perkins, S., Hughes, R. S., & Ahn, C. (2011). Impact of treatment sequence of multimodal therapy for advanced oral cavity cancer with mandible invasion. *Otolaryngology - Head & Neck Surgery*, 145(6), 961-966. *Exclude: Comparator not of interest (sequential multimodal chemotherapy)*
- Myerson, R. J., Garofalo, M. C., El Naqa, I., Abrams, R. A., Apte, A., Bosch, W. R., . . . Kachnic, L. A. (2009). Elective clinical target volumes for conformal therapy in anorectal cancer: A radiation therapy oncology group consensus panel contouring atlas. *International Journal of Radiation Oncology, Biology, Physics*, 74(3), 824-830. *Exclude: Intervention not of interest (clinical target volume)*
- Myrehaug, S., Chan, G., Craig, T., Weinberg, V., Cheng, C., Roach, M., 3rd, . . . Sahgal, A. (2012). A treatment planning and acute toxicity comparison of two pelvic nodal volume delineation techniques and delivery comparison of intensity-modulated radiotherapy versus volumetric modulated arc therapy for hypofractionated high-risk prostate cancer radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 82(4), e657-62. *Exclude: Study size*
- Nagano, H., Yoshifuku, K., Deguchi, K., & Kurono, Y. (2010). Adenocarcinoma of the paranasal sinuses and nasal cavity with lung metastasis showing complete response to combination chemotherapy with docetaxel, cisplatin and 5-fluorouracil (TPF): A case report. *Auris, Nasus, Larynx*, 37(2), 238-243. *Exclude: Study size*



- Nakamura, J. L., Pirzkall, A., Carol, M. P., Xia, P., Smith, V., Wara, W. M., . . . Sneed, P. K. (2003). Comparison of intensity-modulated radiosurgery with gamma knife radiosurgery for challenging skull base lesions. *International Journal of Radiation Oncology, Biology, Physics*, 55(1), 99-109. *Exclude: Sample size*
- Namiki, S., Ishidoya, S., Ito, A., Tochigi, T., Numata, I., Narazaki, K., . . . Arai, Y. (2009). Five-year follow-up of health-related quality of life after intensity-modulated radiation therapy for prostate cancer. *Japanese Journal of Clinical Oncology*, 39(11), 732-738. *Exclude: Included in De Neve (2012)*
- Namiki, S., Ishidoya, S., Tochigi, T., Kawamura, S., Kuwahara, M., Terai, A., . . . Arai, Y. (2006). Health-related quality of life after intensity modulated radiation therapy for localized prostate cancer: Comparison with conventional and conformal radiotherapy. *Japanese Journal of Clinical Oncology*, 36(4), 224-230. *Exclude: Date*
- Nangia, S., Chufal, K. S., Arivazhagan, V., Srinivas, P., Tyagi, A., & Ghosh, D. (2006). Compensator-based intensity-modulated radiotherapy in head and neck cancer: Our experience in achieving dosimetric parameters and their clinical correlation. *Clinical Oncology (Royal College of Radiologists)*, 18(6), 485-492. *Exclude: Study size*
- Naqvi, S. A., Earl, M. A., & Shepard, D. M. (2003). Convolution/superposition using the monte carlo method. *Physics in Medicine & Biology*, 48(14), 2101-2121. *Exclude: Treatment planning*
- Narayana, A., Yamada, J., Berry, S., Shah, P., Hunt, M., Gutin, P. H., & Leibel, S. A. (2006). Intensity-modulated radiotherapy in high-grade gliomas: Clinical and dosimetric results. *International Journal of Radiation Oncology, Biology, Physics*, 64(3), 892-897. *Exclude: Included in systematic review (Amelio 2010)*
- Nath, S. K., Lawson, J. D., Simpson, D. R., Vanderspek, L., Wang, J. Z., Alksne, J. F., . . . Murphy, K. T. (2010). Single-isocenter frameless intensity-modulated stereotactic radiosurgery for simultaneous treatment of multiple brain metastases: Clinical experience. *International Journal of Radiation Oncology, Biology, Physics*, 78(1), 91-97. *Exclude: Intervention not of interest (SRS)*
- Neicu, T., Shirato, H., Seppenwoolde, Y., & Jiang, S. B. (2003). Synchronized moving aperture radiation therapy (SMART): Average tumour trajectory for lung patients. *Physics in Medicine & Biology*, 48(5), 587-598. *Exclude: Treatment planning*
- Nelson, C., Starkschall, G., & Chang, J. Y. (2006). The potential for dose escalation in lung cancer as a result of systematically reducing margins used to generate planning target volume. *International Journal of Radiation Oncology, Biology, Physics*, 65(2), 573-586. *Exclude: Study size*
- Nguyen, N. P., Ceizyk, M., Vos, P., Vinh-Hung, V., Davis, R., Desai, A., . . . Smith-Raymond, L. (2010). Effectiveness of image-guided radiotherapy for laryngeal sparing in head and neck cancer. *Oral Oncology*, 46(4), 283-286. *Exclude: Comparator not of interest (image-guided radiotherapy)*
- Nguyen, N. P., Krafft, S. P., Vos, P., Vinh-Hung, V., Ceizyk, M., Jang, S., . . . Smith-Raymond, L. (2011). Feasibility of tomotherapy for graves' ophthalmopathy: Dosimetry comparison with conventional radiotherapy. *Strahlentherapie Und Onkologie*, 187(9), 568-574. *Exclude: Study size*
- Nguyen, N. P., Smith-Raymond, L., Vinh-Hung, V., Sloan, D., Davis, R., Vos, P., . . . Ceizyk, M. (2011). Feasibility of tomotherapy to spare the cochlea from excessive radiation in head and neck cancer. *Oral Oncology*, 47(5), 414-419. *Exclude: Treatment planning*
- Nichols, A. C., Faquin, W. C., Westra, W. H., Mroz, E. A., Begum, S., Clark, J. R., & Rocco, J. W. (2009). HPV-16 infection predicts treatment outcome in oropharyngeal squamous cell carcinoma. *Otolaryngology - Head & Neck Surgery*, 140(2), 228-234. *Exclude: Study design (no comparator)*
- Nicolini, G., Fogliata, A., & Cozzi, L. (2005). IMRT with the sliding window: Comparison of the static and dynamic methods. dosimetric and spectral analysis. *Radiotherapy & Oncology*, 75(1), 112-119. *Exclude: Treatment planning*
- Nieder, C., Grosu, A. L., Stark, S., Wiedenmann, N., Busch, R., Kneschaurek, P., & Molls, M. (2006). Dose to the intracranial arteries in stereotactic and intensity-modulated radiotherapy for skull base tumors. *International Journal of Radiation Oncology, Biology, Physics*, 64(4), 1055-1059. *Exclude: Treatment planning*

- Nieder, C., Schill, S., Kneschaurek, P., & Molls, M. (2007). Comparison of three different mediastinal radiotherapy techniques in female patients: Impact on heart sparing and dose to the breasts. *Radiotherapy & Oncology*, 82(3), 301-307. *Exclude: Study size*
- Niehoff, P., Dietrich, J., Ostertag, H., Schmid, A., Kohr, P., Kimmig, B., & Kovacs, G. (2006). High-dose-rate (HDR) or pulsed-dose-rate (PDR) perioperative interstitial intensity-modulated brachytherapy (IMBT) for local recurrences of previously irradiated breast or thoracic wall following breast cancer. *Strahlentherapie Und Onkologie*, 182(2), 102-107. *Exclude: Date*
- Niehoff, P., Loch, T., Nurnberg, N., Galalae, R., Egberts, J., Kohr, P., & Kovacs, G. (2005). Feasibility and preliminary outcome of salvage combined HDR brachytherapy and external beam radiotherapy (EBRT) for local recurrences after radical prostatectomy. *Brachytherapy*, 4(2), 141-145. *Exclude: Date*
- Nijdam, W., Levendag, P., Fuller, D., Schulz, R., Prevost, J. B., Noever, I., & Uyl-de Groot, C. (2007). Robotic radiosurgery vs. brachytherapy as a boost to intensity modulated radiotherapy for tonsillar fossa and soft palate tumors: The clinical and economic impact of an emerging technology. *Technology in Cancer Research & Treatment*, 6(6), 611-620. *Exclude: Intervention not of interest (SRS vs brachytherapy in addition to IMRT)*
- Nijdam, W., Levendag, P., Noever, I., Uyl-de Groot, C., & van Agthoven, M. (2004). Cost analysis comparing brachytherapy versus surgery for primary carcinoma of the tonsillar fossa and/or soft palate. *International Journal of Radiation Oncology, Biology, Physics*, 59(2), 488-494. *Exclude: Intervention not of interest (proton therapy)*
- Nijkamp, J., Doodeman, B., Marijnen, C., Vincent, A., & van Vliet-Vroegindewij, C. (2012). Bowel exposure in rectal cancer IMRT using prone, supine, or a belly board. *Radiotherapy & Oncology*, 102(1), 22-29. *Exclude: Study size*
- Nijkamp, J., Kusters, M., Beets-Tan, R. G., Martijn, H., Beets, G. L., van de Velde, C. J., & Marijnen, C. A. (2011). Three-dimensional analysis of recurrence patterns in rectal cancer: The cranial border in hypofractionated preoperative radiotherapy can be lowered. *International Journal of Radiation Oncology, Biology, Physics*, 80(1), 103-110. *Exclude: Study size*
- Nikoghosyan, A. V., Schulz-Ertner, D., Herfarth, K., Didinger, B., Munter, M. W., Jensen, A. D., . . . Debus, J. (2011). Acute toxicity of combined photon IMRT and carbon ion boost for intermediate-risk prostate cancer - acute toxicity of 12C for PC. *Acta Oncologica*, 50(6), 784-790. *Exclude: Study size*
- Nill, S., Tucking, T., Munter, M. W., & Oelfke, U. (2005). Intensity modulated radiation therapy with multileaf collimators of different leaf widths: A comparison of achievable dose distributions. *Radiotherapy & Oncology*, 75(1), 106-111. *Exclude: Study size*
- Nill, S., Unkelbach, J., Dietrich, L., & Oelfke, U. (2005). Online correction for respiratory motion: Evaluation of two different imaging geometries. *Physics in Medicine & Biology*, 50(17), 4087-4096. *Exclude: Treatment planning*
- Nioutsikou, E., Bedford, J. L., Christian, J. A., Brada, M., & Webb, S. (2004). Segmentation of IMRT plans for radical lung radiotherapy delivery with the step-and-shoot technique. *Medical Physics*, 31(4), 892-901. *Exclude: Treatment planning*
- Nishimura, Y., Nakamatsu, K., Shibata, T., Kanamori, S., Koike, R., Okumura, M., & Suzuki, M. (2005). Importance of the initial volume of parotid glands in xerostomia for patients with head and neck cancers treated with IMRT. *Japanese Journal of Clinical Oncology*, 35(7), 375-379. *Exclude: Date*
- Nishimura, Y., Shibata, T., Nakamatsu, K., Kanamori, S., Koike, R., Okubo, M., . . . Okumura, M. (2010). A two-step intensity-modulated radiation therapy method for nasopharyngeal cancer: The kinki university experience. *Japanese Journal of Clinical Oncology*, 40(2), 130-138. *Exclude: Study size*
- Novak, P., Moros, E. G., Straube, W. L., & Myerson, R. J. (2005). SURLAS: A new clinical grade ultrasound system for sequential or concomitant thermoradiotherapy of superficial tumors: Applicator description. *Medical Physics*, 32(1), 230-240. *Exclude: Treatment planning*

- Nutting, C. M., Bedford, J. L., Cosgrove, V. P., Tait, D. M., Dearnaley, D. P., & Webb, S. (2002). Intensity-modulated radiotherapy reduces lung irradiation in patients with carcinoma of the oesophagus. *Frontiers of Radiation Therapy & Oncology*, 37, 128-131. *Exclude: Study size*
- Nutting, C. M., Morden, J. P., Harrington, K. J., Urbano, T. G., Bhide, S. A., Clark, C., . . . PARSPORT trial management, g. (2011). Parotid-sparing intensity modulated versus conventional radiotherapy in head and neck cancer (PARSPORT): A phase 3 multicentre randomised controlled trial. *Lancet Oncology*, 12(2), 127-136. *Exclude: Included in De Neve (2012)*
- Nuyts, S., Dirix, P., Hermans, R., Poorten, V. V., Delaere, P., Weltens, C., & Van den Bogaert, W. (2007). Early experience with a hybrid accelerated radiotherapy schedule for locally advanced head and neck cancer. *Head & Neck*, 29(8), 720-730. *Exclude: Date*
- Nuytens, J. J., Robertson, J. M., Yan, D., & Martinez, A. (2004). The influence of small bowel motion on both a conventional three-field and intensity modulated radiation therapy (IMRT) for rectal cancer. *Cancer Radiotherapie*, 8(5), 297-304. *Exclude: Study size*
- O'Daniel, J. C., Dong, L., Zhang, L., Wang, H., Tucker, S. L., Kudchadker, R. J., . . . Mohan, R. (2008). Daily bone alignment with limited repeat CT correction rivals daily ultrasound alignment for prostate radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 71(1), 274-280. *Exclude: Study size*
- Odrzaska, K., Dolezel, M., Vanasek, J., Vaculikova, M., Zouhar, M., Sefrova, J., . . . Hoffmann, P. (2010). Late toxicity after conformal and intensity-modulated radiation therapy for prostate cancer: Impact of previous surgery for benign prostatic hyperplasia. *International Journal of Urology*, 17(9), 784-790. *Exclude: Included in De Neve (2012)*
- Odrzaska, K., Petera, J., Zouhar, M., Vosmik, M., Vaculikova, M., Dolezel, M., . . . Dolezal, J. (2005). Clinical results of intensity-modulated radiation therapy (IMRT) for tumors of the head and neck region. *Neoplasma*, 52(2), 85-94. *Exclude: Date*
- Oelfke, U., & Bortfeld, T. (2003). Optimization of physical dose distributions with hadron beams: Comparing photon IMRT with IMPT. *Technology in Cancer Research & Treatment*, 2(5), 401-412. *Exclude: Treatment planning*
- Oermann, E. K., Slack, R. S., Hanscom, H. N., Lei, S., Suy, S., Park, H. U., . . . Collins, S. P. (2010). A pilot study of intensity modulated radiation therapy with hypofractionated stereotactic body radiation therapy (SBRT) boost in the treatment of intermediate- to high-risk prostate cancer. *Technology in Cancer Research & Treatment*, 9(5), 453-462. *Exclude: Intervention not of interest (Cyberknife, SBRT)*
- Offerman, S., Lamba, M., & Lavigne, R. (2011). Effect of breast volume on treatment reproducibility on a tomotherapy unit in the treatment of breast cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(2), 417-421. *Exclude: Treatment planning*
- Olch, A. J. (2002). Dosimetric accuracy of the ITP inverse treatment planning system. *Medical Physics*, 29(11), 2484-2488. *Exclude: Study size*
- Olch, A. J. (2002). Dosimetric performance of an enhanced dose range radiographic film for intensity-modulated radiation therapy quality assurance. *Medical Physics*, 29(9), 2159-2168. *Exclude: Treatment planning*
- Olch, A. J. (2005). Evaluation of a computed radiography system for megavoltage photon beam dosimetry. *Medical Physics*, 32(9), 2987-2999. *Exclude: Treatment planning*
- Olch, A. J. (2012). Evaluation of the accuracy of 3DVH software estimates of dose to virtual ion chamber and film in composite IMRT QA. *Medical Physics*, 39(1), 81-86. *Exclude: Study size*
- Olch, A. J., & Whitaker, M. L. (2010). Validation of a treatment plan-based calibration method for 2D detectors used for treatment delivery quality assurance. *Medical Physics*, 37(8), 4485-4494. *Exclude: Study size*
- Oliver, M., Chen, J., Wong, E., Van Dyk, J., & Perera, F. (2007). A treatment planning study comparing whole breast radiation therapy against conformal, IMRT and tomotherapy for accelerated partial breast irradiation. *Radiotherapy & Oncology*, 82(3), 317-323. *Exclude: Treatment planning*

- Olofsson, L., Karlsson, M. G., & Karlsson, M. (2005). Effects on electron beam penumbra using the photon MLC to reduce bremsstrahlung leakage for an add-on electron MLC. *Physics in Medicine & Biology*, 50(6), 1191-1203. *Exclude: Treatment planning*
- Olofsson, L., Mu, X., Nill, S., Oelfke, U., Zackrisson, B., & Karlsson, M. (2004). Intensity modulated radiation therapy with electrons using algorithm based energy/range selection methods. *Radiotherapy & Oncology*, 73(2), 223-231. *Exclude: Treatment planning*
- Olson, A. C., Wegner, R. E., Scicutella, C., Heron, D. E., Greenberger, J. S., Huq, M. S., . . . Flickinger, J. C. (2012). Quality assurance analysis of a large multicenter practice: Does increased complexity of intensity-modulated radiotherapy lead to increased error frequency?. *International Journal of Radiation Oncology, Biology, Physics*, 82(1), e77-82. *Exclude: Treatment planning*
- Ong, C. L., Cuijpers, J. P., Senan, S., Slotman, B. J., & Verbakel, W. F. (2011). Impact of the calculation resolution of AAA for small fields and RapidArc treatment plans. *Medical Physics*, 38(8), 4471-4479. *Exclude: Treatment planning*
- Ong, C. L., Verbakel, W. F., Cuijpers, J. P., Slotman, B. J., Lagerwaard, F. J., & Senan, S. (2010). Stereotactic radiotherapy for peripheral lung tumors: A comparison of volumetric modulated arc therapy with 3 other delivery techniques. *Radiotherapy & Oncology*, 97(3), 437-442. *Exclude: Study size*
- Ost, P., De Troyer, B., Fonteyne, V., Oosterlinck, W., & De Meerleer, G. (2011). A matched control analysis of adjuvant and salvage high-dose postoperative intensity-modulated radiotherapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(5), 1316-1322. *Exclude: Treatment planning*
- Otto, K., & Clark, B. G. (2002). Enhancement of IMRT delivery through MLC rotation. *Physics in Medicine & Biology*, 47(22), 3997-4017. *Exclude: Treatment planning*
- Otto, K., Clark, B. G., & Huntzinger, C. (2002). Exploring the limits of spatial resolution in radiation dose delivery. *Medical Physics*, 29(8), 1823-1831. *Exclude: Treatment planning*
- Ottosson, R. O., Engstrom, P. E., Sjostrom, D., Behrens, C. F., Karlsson, A., Knoos, T., & Ceberg, C. (2009). The feasibility of using pareto fronts for comparison of treatment planning systems and delivery techniques. *Acta Oncologica*, 48(2), 233-237. *Exclude: Treatment planning*
- Ove, R., Cavalieri, R., Noble, D., & Russo, S. M. (2012). Variation of neck position with image-guided radiotherapy for head and neck cancer. *American Journal of Clinical Oncology*, 35(1), 1-5. *Exclude: Treatment planning*
- Pacholke, H. D., Amdur, R. J., Louis, D. A., Yang, H., & Mendenhall, W. M. (2005). The role of intensity modulated radiation therapy for favorable stage tumor of the nasal cavity or ethmoid sinus. *American Journal of Clinical Oncology*, 28(5), 474-478. *Exclude: Study size*
- Pacholke, H. D., Amdur, R. J., Morris, C. G., Li, J. G., Dempsey, J. F., Hinerman, R. W., & Mendenhall, W. M. (2005). Late xerostomia after intensity-modulated radiation therapy versus conventional radiotherapy. *American Journal of Clinical Oncology*, 28(4), 351-358. *Exclude: Date*
- Paelinck, L., De Wagter, C., Van Esch, A., Duthoy, W., Depuydt, T., & De Neve, W. (2005). Comparison of build-up dose between Elekta and Varian linear accelerators for high-energy photon beams using radiochromic film and clinical implications for IMRT head and neck treatments. *Physics in Medicine & Biology*, 50(3), 413-428. *Exclude: Treatment planning*
- Paelinck, L., Smedt, B. D., Reynaert, N., Coghe, M., Gersem, W. D., Wagter, C. D., . . . Neve, W. D. (2006). Comparison of dose-volume histograms of IMRT treatment plans for ethmoid sinus cancer computed by advanced treatment planning systems including monte carlo. *Radiotherapy & Oncology*, 81(3), 250-256. *Exclude: Treatment planning*
- Paganetti, H. (2004). Four-dimensional monte carlo simulation of time-dependent geometries. *Physics in Medicine & Biology*, 49(6), N75-81. *Exclude: Treatment planning*

- Pai Panandiker, A., Ning, H., Likhacheva, A., Ullman, K., Arora, B., Ondos, J., . . . Citrin, D. (2007). Craniospinal irradiation with spinal IMRT to improve target homogeneity. *International Journal of Radiation Oncology, Biology, Physics*, 68(5), 1402-1409. *Exclude: Study size*
- Palazzi, M., Orlandi, E., Pignoli, E., Lualdi, M., Zonca, G., Sangalli, C., . . . Olmi, P. (2006). Target coverage in head and neck cancer treated with intensity-modulated radiotherapy: A comparison between conventional and conformal techniques. *Tumori*, 92(6), 503-510. *Exclude: Study size*
- Palm, A., Kirov, A. S., & LoSasso, T. (2004). Predicting energy response of radiographic film in a 6 MV x-ray beam using monte carlo calculated fluence spectra and absorbed dose. *Medical Physics*, 31(12), 3168-3178. *Exclude: Treatment planning*
- Palma, D., Vollans, E., James, K., Nakano, S., Moiseenko, V., Shaffer, R., . . . Otto, K. (2008). Volumetric modulated arc therapy for delivery of prostate radiotherapy: Comparison with intensity-modulated radiotherapy and three-dimensional conformal radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 996-1001. *Exclude: Treatment planning*
- Papiez, L. (2004). Very high energy electromagnetically-scanned electron beams are an attractive alternative to photon IMRT. for the proposition. *Medical Physics*, 31(7), 1945-1946. *Exclude: Study design (comment)*
- Papieza, L. (2004). DMLC leaf-pair optimal control of IMRT delivery for a moving rigid target. *Medical Physics*, 31(10), 2742-2754. *Exclude: Treatment planning*
- Pappas, E., Maris, T. G., Zacharopoulou, F., Papadakis, A., Manolopoulos, S., Green, S., & Wojnecki, C. (2008). Small SRS photon field profile dosimetry performed using a PinPoint air ion chamber, a diamond detector, a novel silicon-diode array (DOSI), and polymer gel dosimetry. analysis and intercomparison. *Medical Physics*, 35(10), 4640-4648. *Exclude: Treatment planning*
- Paravati, A. J., Heron, D. E., Landsittel, D., Flickinger, J. C., Mintz, A., Chen, Y. F., & Huq, M. S. (2011). Radiotherapy and temozolomide for newly diagnosed glioblastoma and anaplastic astrocytoma: Validation of radiation therapy oncology group-recursive partitioning analysis in the IMRT and temozolomide era. *Journal of Neuro-Oncology*, 104(1), 339-349. *Exclude: Outcomes not of interest*
- Pardo, J., Rosello, J. V., Sanchez-Doblado, F., & Gomez, F. (2006). Verification of intensity modulated profiles using a pixel segmented liquid-filled linear array. *Physics in Medicine & Biology*, 51(11), N211-9. *Exclude: Treatment planning*
- Parent, L., Fielding, A. L., Dance, D. R., Seco, J., & Evans, P. M. (2007). Amorphous silicon EPID calibration for dosimetric applications: Comparison of a method based on monte carlo prediction of response with existing techniques. *Physics in Medicine & Biology*, 52(12), 3351-3368. *Exclude: Treatment planning*
- Parent, L., Seco, J., Evans, P. M., Dance, D. R., & Fielding, A. (2006). Evaluation of two methods of predicting MLC leaf positions using EPID measurements. *Medical Physics*, 33(9), 3174-3182. *Exclude: Treatment planning*
- Parhar, P. K., Duckworth, T., Shah, P., DeWynngaert, J. K., Narayana, A., Formenti, S. C., & Shah, J. N. (2010). Decreasing temporal lobe dose with five-field intensity-modulated radiotherapy for treatment of pituitary macroadenomas. *International Journal of Radiation Oncology, Biology, Physics*, 78(2), 379-384. *Exclude: Study size*
- Park, H. J., Kim, K. J., Park, S. H., Kay, C. S., & Oh, J. S. (2009). Early CT findings of tomotherapy-induced radiation pneumonitis after treatment of lung malignancy. *AJR.American Journal of Roentgenology*, 193(3), W209-13. *Exclude: Intervention not of interest (CT)*
- Park, S. H., Park, H. C., Park, S. W., Oh do, H., Choi, Y., Kim, J. K., . . . Bae, H. (2009). Multi-institutional comparison of intensity modulated radiation therapy (IMRT) planning strategies and planning results for nasopharyngeal cancer. *Journal of Korean Medical Science*, 24(2), 248-255. *Exclude: Treatment planning*
- Parsai, H., Cho, P. S., Phillips, M. H., Giansiracusa, R. S., & Axen, D. (2003). Random and systematic beam modulator errors in dynamic intensity modulated radiotherapy. *Physics in Medicine & Biology*, 48(9), 1109-1121. *Exclude: Treatment planning*

- Partridge, M., Ebert, M., & Hesse, B. M. (2002). IMRT verification by three-dimensional dose reconstruction from portal beam measurements. *Medical Physics*, 29(8), 1847-1858. *Exclude: Treatment planning*
- Pasciuti, K., Iaccarino, G., Soriani, A., Bruzzaniti, V., Marzi, S., Gomellini, S., . . . Landoni, V. (2008). DVHs evaluation in brain metastases stereotactic radiotherapy treatment plans. *Radiotherapy & Oncology*, 87(1), 110-115. *Exclude: Treatment planning*
- Pasciuti, K., Iaccarino, G., Strigari, L., Malatesta, T., Benassi, M., Di Nallo, A. M., . . . Landoni, V. (2011). Tissue heterogeneity in IMRT dose calculation for lung cancer. *Medical Dosimetry*, 36(2), 219-227. *Exclude: Treatment planning*
- Pasler, M., Georg, D., Wirtz, H., & Lutterbach, J. (2011). Effect of photon-beam energy on VMAT and IMRT treatment plan quality and dosimetric accuracy for advanced prostate cancer. *Strahlentherapie Und Onkologie*, 187(12), 792-798. *Exclude: Study size*
- Pasler, M., Wirtz, H., & Lutterbach, J. (2011). Impact of gantry rotation time on plan quality and dosimetric verification--volumetric modulated arc therapy (VMAT) vs. intensity modulated radiotherapy (IMRT). *Strahlentherapie Und Onkologie*, 187(12), 812-819. *Exclude: Treatment planning*
- Patel, M., Hoffe, S., Malafa, M., Hodul, P., Klapman, J., Centeno, B., . . . Springett, G. (2011). Neoadjuvant GTX chemotherapy and IMRT-based chemoradiation for borderline resectable pancreatic cancer. *Journal of Surgical Oncology*, 104(2), 155-161. *Exclude: Study size*
- Patel, S., & DeLaney, T. F. (2008). Advanced-technology radiation therapy for bone sarcomas. *Cancer Control*, 15(1), 21-37. *Exclude: Treatment planning*
- Paulino, A. C., Ferenci, M. S., Chiang, K. Y., Nowlan, A. W., & Marcus, R. B., Jr. (2006). Comparison of conventional to intensity modulated radiation therapy for abdominal neuroblastoma. *Pediatric Blood & Cancer*, 46(7), 739-744. *Exclude: Study size*
- Paulino, A. C., Koshy, M., Howell, R., Schuster, D., & Davis, L. W. (2005). Comparison of CT- and FDG-PET-defined gross tumor volume in intensity-modulated radiotherapy for head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 61(5), 1385-1392. *Exclude: Date*
- Pawlicki, T., Yoo, S., Court, L. E., McMillan, S. K., Rice, R. K., Russell, J. D., . . . Boyer, A. L. (2008). Moving from IMRT QA measurements toward independent computer calculations using control charts. *Radiotherapy & Oncology*, 89(3), 330-337. *Exclude: Treatment planning*
- Paximadis, P., Yoo, G., Lin, H. S., Jacobs, J., Sukari, A., Dyson, G., . . . Kim, H. (2012). Concurrent chemoradiotherapy improves survival in patients with hypopharyngeal cancer. *International Journal of Radiation Oncology, Biology, Physics*, 82(4), 1515-1521. *Exclude: Intervention not specific (radiotherapy)*
- Peignaux, K., Truc, G., Barillot, I., Ammor, A., Naudy, S., Crehange, G., & Maingon, P. (2006). Clinical assessment of the use of the sonarray system for daily prostate localization. *Radiotherapy & Oncology*, 81(2), 176-178. *Exclude: Intervention not of interest (Sonarray ultrasound system)*
- Penagaricano, J., Moros, E., Corry, P., Saylor, R., & Ratanatharathorn, V. (2009). Pediatric craniospinal axis irradiation with helical tomotherapy: Patient outcome and lack of acute pulmonary toxicity. *International Journal of Radiation Oncology, Biology, Physics*, 75(4), 1155-1161. *Exclude: Study size*
- Penagaricano, J. A., Moros, E. G., Ratanatharathorn, V., Yan, Y., & Corry, P. (2010). Evaluation of spatially fractionated radiotherapy (GRID) and definitive chemoradiotherapy with curative intent for locally advanced squamous cell carcinoma of the head and neck: Initial response rates and toxicity. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1369-1375. *Exclude: Study size*
- Penagaricano, J. A., Ratanatharathorn, V., Papanikolaou, N., & Yan, Y. (2004). Intensity-modulated radiation therapy reduces the dose to normal tissue in T2N0M0 squamous cell carcinoma of the glottic larynx. *Medical Dosimetry*, 29(4), 254-257. *Exclude: Treatment planning*

- Penagaricano, J. A., Yan, Y., Shi, C., Linskey, M. E., & Ratanatharathorn, V. (2006). Dosimetric comparison of helical tomotherapy and gamma knife stereotactic radiosurgery for single brain metastasis. *Radiation Oncology, 1*, 26. *Exclude: Study size*
- Peponi, E., Glanzmann, C., Kunz, G., Renner, C., Tomuschat, K., & Studer, G. (2010). Simultaneous integrated boost intensity-modulated radiotherapy (SIB[non-breaking hyphen]IMRT) in nasopharyngeal cancer. *Strahlentherapie Und Onkologie, 186*(3), 135-142. *Exclude: Study size*
- Perks, J. R., Lehmann, J., Chen, A. M., Yang, C. C., Stern, R. L., & Purdy, J. A. (2008). Comparison of peripheral dose from image-guided radiation therapy (IGRT) using kV cone beam CT to intensity-modulated radiation therapy (IMRT). *Radiotherapy & Oncology, 89*(3), 304-310. *Exclude: Treatment planning*
- Perna, L., Fiorino, C., Cozzarini, C., Broggi, S., Cattaneo, G. M., De Cobelli, F., . . . Calandrino, R. (2009). Sparing the penile bulb in the radical irradiation of clinically localised prostate carcinoma: A comparison between MRI and CT prostatic apex definition in 3DCRT, linac-IMRT and helical tomotherapy. *Radiotherapy & Oncology, 93*(1), 57-63. *Exclude: Study size*
- Petera, J., Papik, Z., Zouhar, M., Jansa, J., Odrzka, K., & Dvorak, J. (2007). The technique of intensity-modulated radiotherapy in the treatment of cholangiocarcinoma. *Tumori, 93*(3), 257-263. *Exclude: Study size*
- Petit, S. F., Wu, B., Kazhdan, M., Dekker, A., Simari, P., Kumar, R., . . . McNutt, T. (2012). Increased organ sparing using shape-based treatment plan optimization for intensity modulated radiation therapy of pancreatic adenocarcinoma. *Radiotherapy & Oncology, 102*(1), 38-44. *Exclude: Treatment planning*
- Petric, M. P., Clark, B. G., & Robar, J. L. (2005). A comparison of two commercial treatment-planning systems to IMRT. *Journal of Applied Clinical Medical Physics, 6*(3), 63-80. *Exclude: Treatment planning*
- Petti, P. L., Chuang, C. F., Smith, V., & Larson, D. A. (2006). Peripheral doses in CyberKnife radiosurgery. *Medical Physics, 33*(6), 1770-1779. *Exclude: Intervention not of interest (Cyberknife)*
- Pezner, R. D., Liu, A., Chen, Y. J., Smith, D. D., & Paz, I. B. (2011). Full-dose adjuvant postoperative radiation therapy for retroperitoneal sarcomas. *American Journal of Clinical Oncology, 34*(5), 511-516. *Exclude: Study size (harms)*
- Pezner, R. D., Liu, A., Han, C., Chen, Y. J., Schultheiss, T. E., & Wong, J. Y. (2006). Dosimetric comparison of helical tomotherapy treatment and step-and-shoot intensity-modulated radiotherapy of retroperitoneal sarcoma. *Radiotherapy & Oncology, 81*(1), 81-87. *Exclude: Study size*
- Pflugfelder, D., Wilkens, J. J., Nill, S., & Oelfke, U. (2008). A comparison of three optimization algorithms for intensity modulated radiation therapy. *Zeitschrift Fur Medizinische Physik, 18*(2), 111-119. *Exclude: Treatment planning*
- Phillips, M. H., & Holdsworth, C. (2011). When is better best? A multiobjective perspective. *Medical Physics, 38*(3), 1635-1640. *Exclude: Study design (narrative review)*
- Pickles, T., & Pollack, A. (2006). The case for dose escalation versus adjuvant androgen deprivation therapy for intermediate risk prostate cancer. *Canadian Journal of Urology, 13*(Suppl 2), 68-71. *Exclude: Treatment planning*
- Pieters, B. R., van de Kamer, J. B., van Herten, Y. R., van Wieringen, N., D'Olieslager, G. M., van der Heide, U. A., & Koning, C. C. (2008). Comparison of biologically equivalent dose-volume parameters for the treatment of prostate cancer with concomitant boost IMRT versus IMRT combined with brachytherapy. *Radiotherapy & Oncology, 88*(1), 46-52. *Exclude: Treatment planning*
- Pignol, J. P., Keller, B. M., & Ravi, A. (2011). Doses to internal organs for various breast radiation techniques--implications on the risk of secondary cancers and cardiomyopathy. *Radiation Oncology, 6*, 5. *Exclude: Treatment planning*
- Pignol, J. P., Olivetto, I., Rakovitch, E., Gardner, S., Sixel, K., Beckham, W., . . . Paszat, L. (2008). A multicenter randomized trial of breast intensity-modulated radiation therapy to reduce acute radiation dermatitis. *Journal of Clinical Oncology, 26*(13), 2085-2092. *Exclude: Date*

- Pinkawa, M., Pursch-Lee, M., Asadpour, B., Gagel, B., Piroth, M. D., Klotz, J., . . . Eble, M. J. (2008). Image-guided radiotherapy for prostate cancer. implementation of ultrasound-based prostate localization for the analysis of inter- and intrafraction organ motion. *Strahlentherapie Und Onkologie*, 184(12), 679-685. *Exclude: Treatment planning*
- Pirzkall, A., Debus, J., Haering, P., Rhein, B., Grosser, K. H., Hoss, A., & Wannemacher, M. (2003). Intensity modulated radiotherapy (IMRT) for recurrent, residual, or untreated skull-base meningiomas: Preliminary clinical experience. *International Journal of Radiation Oncology, Biology, Physics*, 55(2), 362-372. *Exclude: Study size (only reported on harms)*
- Platek, M. E., Reid, M. E., Wilding, G. E., Jaggernauth, W., Rigual, N. R., Hicks, W. L., Jr, . . . Singh, A. K. (2011). Pretreatment nutritional status and locoregional failure of patients with head and neck cancer undergoing definitive concurrent chemoradiation therapy. *Head & Neck*, 33(11), 1561-1568. *Exclude: Outcome of interest (nutritional status markers as predictors of locoregional failure)*
- Ploquin, N., Kay, I., Rangel-Baltazar, A., Lau, H., & Dunscombe, P. (2006). A comparison of techniques for simulating set-up error and uncertainty in head and neck IMRT. *Medical Physics*, 33(9), 3213-3219. *Exclude: Treatment planning*
- Ploquin, N., Song, W., Lau, H., & Dunscombe, P. (2005). Intensity modulated radiation therapy for oropharyngeal cancer: The sensitivity of plan objectives and constraints to set-up uncertainty. *Physics in Medicine & Biology*, 50(15), 3515-3533. *Exclude: Treatment planning*
- Polat, B., Guenther, I., Wilbert, J., Goebel, J., Sweeney, R. A., Flentje, M., & Guckenberger, M. (2008). Intra-fractional uncertainties in image-guided intensity-modulated radiotherapy (IMRT) of prostate cancer. *Strahlentherapie Und Onkologie*, 184(12), 668-673. *Exclude: Treatment planning*
- Pollack, A., Hanlon, A. L., Horwitz, E. M., Feigenberg, S. J., Konski, A. A., Movsas, B., . . . Price, R. A., Jr. (2006). Dosimetry and preliminary acute toxicity in the first 100 men treated for prostate cancer on a randomized hypofractionation dose escalation trial. *International Journal of Radiation Oncology, Biology, Physics*, 64(2), 518-526. *Exclude: Date*
- Popescu, C. C., Olivotto, I. A., Beckham, W. A., Ansbacher, W., Zavgorodni, S., Shaffer, R., . . . Otto, K. (2010). Volumetric modulated arc therapy improves dosimetry and reduces treatment time compared to conventional intensity-modulated radiotherapy for locoregional radiotherapy of left-sided breast cancer and internal mammary nodes. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 287-295. *Exclude: Study size*
- Popovtzer, A., Gluck, I., Chepeha, D. B., Teknos, T. N., Moyer, J. S., Prince, M. E., . . . Eisbruch, A. (2009). The pattern of failure after reirradiation of recurrent squamous cell head and neck cancer: Implications for defining the targets. *International Journal of Radiation Oncology, Biology, Physics*, 74(5), 1342-1347. *Exclude: Outcomes not specific to IMRT*
- Poppe, M. M., Narra, V., Yue, N. J., Zhou, J., Nelson, C., & Jabbour, S. K. (2011). A comparison of helical intensity-modulated radiotherapy, intensity-modulated radiotherapy, and 3D-conformal radiation therapy for pancreatic cancer. *Medical Dosimetry*, 36(4), 351-357. *Exclude: Study size*
- Popple, R. A., Prellop, P. B., Spencer, S. A., De Los Santos, J. F., Duan, J., Fiveash, J. B., & Brezovich, I. A. (2005). Simultaneous optimization of sequential IMRT plans. *Medical Physics*, 32(11), 3257-3266. *Exclude: Treatment size*
- Potters, L., Gaspar, L. E., Kavanagh, B., Galvin, J. M., Hartford, A. C., Hevezi, J. M., . . . American College of, R. (2010). American society for therapeutic radiology and oncology (ASTRO) and american college of radiology (ACR) practice guidelines for image-guided radiation therapy (IGRT). *International Journal of Radiation Oncology, Biology, Physics*, 76(2), 319-325.



- Pow, E. H., Kwong, D. L., McMillan, A. S., Wong, M. C., Sham, J. S., Leung, L. H., & Leung, W. K. (2006). Xerostomia and quality of life after intensity-modulated radiotherapy vs. conventional radiotherapy for early-stage nasopharyngeal carcinoma: Initial report on a randomized controlled clinical trial. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 981-991. *Exclude: Date*
- Prabhakar, R., Julka, P. K., Malik, M., Ganesh, T., Joshi, R. C., Sridhar, P. S., . . . Thulkar, S. (2007). Comparison of contralateral breast dose for various tangential field techniques in clinical radiotherapy. *Technology in Cancer Research & Treatment*, 6(2), 135-138. *Exclude: Treatment planning*
- Price, A. (2011). What is the role of radiotherapy in malignant pleural mesothelioma? *Oncologist*, 16(3), 359-365. *Exclude: Study design (narrative review)*
- Price, S., Williams, M., Butson, M., & Metcalfe, P. (2006). Comparison of skin dose between conventional radiotherapy and IMRT. *Australasian Physical & Engineering Sciences in Medicine*, 29(3), 272-277. *Exclude: Treatment planning*
- Provencher, S., Oehler, C., Lavertu, S., Jolicoeur, M., Fortin, B., & Donath, D. (2010). Quality of life and tumor control after short split-course chemoradiation for anal canal carcinoma. *Radiation Oncology*, 5, 41. *Exclude: Intervention not of interest (EBRT + chemotherapy for anal cancer)*
- Pucar, D., Hricak, H., Shukla-Dave, A., Kuroiwa, K., Drobnjak, M., Eastham, J., . . . Zelefsky, M. J. (2007). Clinically significant prostate cancer local recurrence after radiation therapy occurs at the site of primary tumor: Magnetic resonance imaging and step-section pathology evidence. *International Journal of Radiation Oncology, Biology, Physics*, 69(1), 62-69. *Exclude: Study size*
- Purdie, T. G., Dinniwell, R. E., Letourneau, D., Hill, C., & Sharpe, M. B. (2011). Automated planning of tangential breast intensity-modulated radiotherapy using heuristic optimization. *International Journal of Radiation Oncology, Biology, Physics*, 81(2), 575-583. *Exclude: Treatment planning*
- Puri, D. R., Chou, W., & Lee, N. (2005). Intensity-modulated radiation therapy in head and neck cancers: Dosimetric advantages and update of clinical results. *American Journal of Clinical Oncology*, 28(4), 415-423. *Exclude: Study design (narrative)*
- Puri, D. R., Wexler, L. H., Meyers, P. A., La Quaglia, M. P., Healey, J. H., & Wolden, S. L. (2006). The challenging role of radiation therapy for very young children with rhabdomyosarcoma. *International Journal of Radiation Oncology, Biology, Physics*, 65(4), 1177-1184. *Exclude: Study size*
- Qiu, J. J., Chang, Z., Wu, Q. J., Yoo, S., Horton, J., & Yin, F. F. (2010). Impact of volumetric modulated arc therapy technique on treatment with partial breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 78(1), 288-296. *Exclude: Study size*
- Que, W., Kung, J., & Dai, J. (2004). 'Tongue-and-groove' effect in intensity modulated radiotherapy with static multileaf collimator fields. *Physics in Medicine & Biology*, 49(3), 399-405. *Exclude: Treatment planning*
- Rades, D., Fehlauer, F., Wroblewski, J., Albers, D., Schild, S. E., & Schmidt, R. (2007). Prognostic factors in head-and-neck cancer patients treated with surgery followed by intensity-modulated radiotherapy (IMRT), 3D-conformal radiotherapy, or conventional radiotherapy. *Oral Oncology*, 43(6), 535-543. *Exclude: Date*
- Raggi, E., Mosleh-Shirazi, M. A., & Saran, F. H. (2008). An evaluation of conformal and intensity-modulated radiotherapy in whole ventricular radiotherapy for localised primary intracranial germinomas. *Clinical Oncology (Royal College of Radiologists)*, 20(3), 253-260. *Exclude: Study size*
- Ramaekers, B. L., Pijls-Johannesma, M., Joore, M. A., van den Ende, P., Langendijk, J. A., Lambin, P., . . . Grutters, J. P. (2011). Systematic review and meta-analysis of radiotherapy in various head and neck cancers: Comparing photons, carbon-ions and protons. *Cancer Treatment Reviews*, 37(3), 185-201. *Exclude: Comparator not of interest (proton beam, carbon-ions)*
- Rao, M., Cao, D., Chen, F., Ye, J., Mehta, V., Wong, T., & Shepard, D. (2010). Comparison of anatomy-based, fluence-based and aperture-based treatment planning approaches for VMAT. *Physics in Medicine & Biology*, 55(21), 6475-6490. *Exclude: Study size*

- Rao, M., Yang, W., Chen, F., Sheng, K., Ye, J., Mehta, V., . . . Cao, D. (2010). Comparison of Elekta VMAT with helical tomotherapy and fixed field IMRT: Plan quality, delivery efficiency and accuracy. *Medical Physics*, 37(3), 1350-1359. *Exclude: Study size*
- Rassiah-Szegedi, P., Wang, B., Szegedi, M., Tward, J., Zhao, H., Huang, Y. J., . . . Salter, B. (2011). Individualized margins for prostate patients using a wireless localization and tracking system. *Journal of Applied Clinical Medical Physics*, 12(3), 3516. *Exclude: Study size*
- Reboul, F. L. (2004). Radiotherapy and chemotherapy in locally advanced non-small cell lung cancer: Preclinical and early clinical data. *Hematology - Oncology Clinics of North America*, 18(1), 41-53. *Exclude: Study design (narrative review)*
- Reddy, N. M., Mazur, A. K., Sampath, S., Osian, A., Sood, B. M., Ravi, A., & Nori, D. (2008). The potential for dose dumping in normal tissues with IMRT for pelvic and H&N cancers. *Medical Dosimetry*, 33(1), 55-61. *Exclude: Treatment planning*
- Redmond, K. J., Achanta, P., Grossman, S. A., Armour, M., Reyes, J., Kleinberg, L., . . . Ford, E. C. (2011). A radiotherapy technique to limit dose to neural progenitor cell niches without compromising tumor coverage. *Journal of Neuro-Oncology*, 104(2), 579-587. *Exclude: Treatment planning*
- Reeder, R., Carter, D. L., Howell, K., Henkenberns, P., Tallhamer, M., Johnson, T., . . . Leonard, C. E. (2009). Predictors for clinical outcomes after accelerated partial breast intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 92-97. *Exclude: Included in systematic review (Hayes 2012 [partial breast])*
- Register, S. P., Zhang, X., Mohan, R., & Chang, J. Y. (2011). Proton stereotactic body radiation therapy for clinically challenging cases of centrally and superiorly located stage I non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(4), 1015-1022. *Exclude: Intervention not of interest (SBRT, PSPT, IMPT)*
- Reisner, M. L., Viegas, C. M., Graziotin, R. Z., Santos Batista, D. V., Carneiro, T. M., Mendonca de Araujo, C. M., & Marchiori, E. (2007). Retinoblastoma--comparative analysis of external radiotherapy techniques, including an IMRT technique. *International Journal of Radiation Oncology, Biology, Physics*, 67(3), 933-941. *Exclude: Study size*
- Reissfelder, C., Timke, C., Schmitz-Winnenthal, H., Rahbari, N. N., Koch, M., Klug, F., . . . Weitz, J. (2011). A randomized controlled trial to investigate the influence of low dose radiotherapy on immune stimulatory effects in liver metastases of colorectal cancer. *BMC Cancer*, 11, 419. *Exclude: Study design (description of clinical trial)*
- Reitz, B., & Miften, M. (2008). Comparison of the KonRad IMRT and XiO treatment planning systems. *Journal of Applied Clinical Medical Physics*, 9(3), 2770. *Exclude: Treatment planning*
- Remouchamps, V. M., Vicini, F. A., Sharpe, M. B., Kestin, L. L., Martinez, A. A., & Wong, J. W. (2003). Significant reductions in heart and lung doses using deep inspiration breath hold with active breathing control and intensity-modulated radiation therapy for patients treated with locoregional breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 55(2), 392-406. *Exclude: Sample size*
- Rice, D. C., Smythe, W. R., Liao, Z., Guerrero, T., Chang, J. Y., McAleer, M. F., . . . Stevens, C. W. (2007). Dose-dependent pulmonary toxicity after postoperative intensity-modulated radiotherapy for malignant pleural mesothelioma. *International Journal of Radiation Oncology, Biology, Physics*, 69(2), 350-357. *Exclude: Treatment planning*
- Richardson, S. L., Tome, W. A., Orton, N. P., McNutt, T. R., & Paliwal, B. R. (2003). IMRT delivery verification using a spiral phantom. *Medical Physics*, 30(9), 2553-2558. *Exclude: Treatment planning*
- Rieken, S., Habermehl, D., Nikoghosyan, A., Jensen, A., Haberer, T., Jakel, O., . . . Combs, S. E. (2011). Assessment of early toxicity and response in patients treated with proton and carbon ion therapy at the Heidelberg ion

- therapy center using the raster scanning technique. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), e793-801. *Exclude: Intervention not of interest (proton therapy)*
- Roach, M. C., Turkington, T. G., Higgins, K. A., Hawk, T. C., Hoang, J. K., & Brizel, D. M. (2012). FDG-PET assessment of the effect of head and neck radiotherapy on parotid gland glucose metabolism. *International Journal of Radiation Oncology, Biology, Physics*, 82(1), 321-326. *Exclude: Treatment planning*
- Roberge, D., Kun, L. E., & Freeman, C. R. (2005). Intracranial germinoma: On whole-ventricular irradiation. *Pediatric Blood & Cancer*, 44(4), 358-362. *Exclude: Study size*
- Robinson, D., Murray, B., Underwood, L., Halls, S., & Roa, W. (2004). Escalated median dose for pituitary macroadenomas using intensity-modulated radiation therapy. *Medical Dosimetry*, 29(1), 26-30. *Exclude: Treatment planning*
- Rochet, N., Kieser, M., Sterzing, F., Krause, S., Lindel, K., Harms, W., . . . Debus, J. (2011). Phase II study evaluating consolidation whole abdominal intensity-modulated radiotherapy (IMRT) in patients with advanced ovarian cancer stage FIGO III--the OVAR-IMRT-02 study. *BMC Cancer*, 11, 41. *Excluded: Study design (narrative of clinical trial)*
- Rochet, N., Sterzing, F., Jensen, A., Dinkel, J., Herfarth, K., Schubert, K., . . . Harms, W. (2008). Helical tomotherapy as a new treatment technique for whole abdominal irradiation. *Strahlentherapie Und Onkologie*, 184(3), 145-149. *Exclude: Study size*
- Rochet, N., Sterzing, F., Jensen, A. D., Dinkel, J., Herfarth, K. K., Schubert, K., . . . Harms, W. (2010). Intensity-modulated whole abdominal radiotherapy after surgery and carboplatin/taxane chemotherapy for advanced ovarian cancer: Phase I study. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1382-1389. *Exclude: Study size*
- Rodrigues, G., Yartsev, S., Chen, J., Wong, E., D'Souza, D., Lock, M., . . . Kron, T. (2006). A comparison of prostate IMRT and helical tomotherapy class solutions. *Radiotherapy & Oncology*, 80(3), 374-377. *Exclude: Study size*
- Rodrigues, G., Yartsev, S., Yaremko, B., Perera, F., Dar, A. R., Hammond, A., . . . Bauman, G. (2011). Phase I trial of simultaneous in-field boost with helical tomotherapy for patients with one to three brain metastases. *International Journal of Radiation Oncology, Biology, Physics*, 80(4), 1128-1133. *Exclude: Intervention not of interest (whole brain radiation therapy)*
- Rodrigues, G. B., & Roa, W. H. (2007). In regard to allen et al.: Fatal pneumonitis associated with intensity-modulated radiation therapy for mesothelioma (int J radiat oncol biol phys 2006;65:640-645). *International Journal of Radiation Oncology, Biology, Physics*, 68(3), 959. *Exclude: Study design (letter)*
- Roe, J. W., Carding, P. N., Dwivedi, R. C., Kazi, R. A., Rhys-Evans, P. H., Harrington, K. J., & Nutting, C. M. (2010). Swallowing outcomes following intensity modulated radiation therapy (IMRT) for head & neck cancer - a systematic review. *Oral Oncology*, 46(10), 727-733. *Exclude: Study design (narrative review)*
- Roeder, F., Timke, C., Zwicker, F., Thieke, C., Bischof, M., Debus, J., & Huber, P. E. (2010). Intensity modulated radiotherapy (IMRT) in benign giant cell tumors--a single institution case series and a short review of the literature. *Radiation Oncology*, 5, 18. *Exclude: Study size*
- Roeder, F., Zwicker, F., Saleh-Ebrahimi, L., Timke, C., Thieke, C., Bischof, M., . . . Huber, P. E. (2011). Intensity modulated or fractionated stereotactic reirradiation in patients with recurrent nasopharyngeal cancer. *Radiation Oncology*, 6, 22. *Excluded: Study size*
- Roland, T. F., Stathakis, S., Ramer, R., & Papanikolaou, N. (2008). Measurement and comparison of skin dose for prostate and head-and-neck patients treated on various IMRT delivery systems. *Applied Radiation & Isotopes*, 66(12), 1844-1849. *Exclude: Treatment planning*
- Romeijn, H. E., Ahuja, R. K., Dempsey, J. F., Kumar, A., & Li, J. G. (2003). A novel linear programming approach to fluence map optimization for intensity modulated radiation therapy treatment planning. *Physics in Medicine & Biology*, 48(21), 3521-3542. *Exclude: Treatment planning*

- Rong, Y., Tang, G., Welsh, J. S., Mohiuddin, M. M., Paliwal, B., & Yu, C. X. (2011). Helical tomotherapy versus single-arc intensity-modulated arc therapy: A collaborative dosimetric comparison between two institutions. *International Journal of Radiation Oncology, Biology, Physics*, 81(1), 284-296. *Exclude: Study size*
- Rongsriyam, K., Rojpornpradit, P., Lertbutsayanukul, C., Sanghangthum, T., & Oonsiri, S. (2008). Dosimetric study of inverse-planned intensity modulated, forward-planned intensity modulated and conventional tangential techniques in breast conserving radiotherapy. *Journal of the Medical Association of Thailand*, 91(10), 1571-1582. *Exclude: Treatment planning*
- Rose, J., Rodrigues, G., Yaremko, B., Lock, M., & D'Souza, D. (2009). Systematic review of dose-volume parameters in the prediction of esophagitis in thoracic radiotherapy. *Radiotherapy & Oncology*, 91(3), 282-287. *Exclude: Treatment planning*
- Rosen, I., Liu, H. H., Childress, N., & Liao, Z. (2005). Interactively exploring optimized treatment plans. *International Journal of Radiation Oncology, Biology, Physics*, 61(2), 570-582. *Exclude: Treatment planning*
- Rosenschold, P. M., Engelholm, S., Ohlhues, L., Law, I., Vogelius, I., & Engelholm, S. A. (2011). Photon and proton therapy planning comparison for malignant glioma based on CT, FDG-PET, DTI-MRI and fiber tracking. *Acta Oncologica*, 50(6), 777-783. *Exclude: Study size*
- Rosenthal, D. I., Chambers, M. S., Fuller, C. D., Rebuena, N. C., Garcia, J., Kies, M. S., . . . Garden, A. S. (2008). Beam path toxicities to non-target structures during intensity-modulated radiation therapy for head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 72(3), 747-755. *Exclude: Date*
- Rosewall, T., Bayley, A. J., Chung, P., Le, L. W., Xie, J., Baxi, S., . . . Milosevic, M. (2011). The effect of delineation method and observer variability on bladder dose-volume histograms for prostate intensity modulated radiotherapy. *Radiotherapy & Oncology*, 101(3), 479-485. *Exclude: Treatment planning*
- Roth, J., Engenhardt-Cabillic, R., Eberhardt, L., Timmesfeld, N., & Strassmann, G. (2011). Preoxygenated hyperventilated hypocapnic apnea-induced radiation (PHAIR) in breast cancer patients. *Radiotherapy & Oncology*, 100(2), 231-235. *Exclude: Study size*
- Rothschild, S., Ciernik, I. F., Hartmann, M., Schuknecht, B., Lutolf, U. M., & Huber, A. M. (2009). Cholesteatoma triggering squamous cell carcinoma: Case report and literature review of a rare tumor. *American Journal of Otolaryngology*, 30(4), 256-260. *Exclude: Study size*
- Rothschild, S., Studer, G., Seifert, B., Huguenin, P., Glanzmann, C., Davis, J. B., . . . Ciernik, I. F. (2007). PET/CT staging followed by intensity-modulated radiotherapy (IMRT) improves treatment outcome of locally advanced pharyngeal carcinoma: A matched-pair comparison. *Radiation Oncology*, 2, 22. *Exclude: Date*
- RTOG 0522: A randomized phase III trial of concurrent accelerated radiation and cisplatin versus concurrent accelerated radiation, cisplatin, and cetuximab [followed by surgery for selected patients] for stage III and IV head and neck carcinomas. (2007). *Clinical Advances in Hematology & Oncology*, 5(2), 79-81. *Exclude: Date*
- Ruben, J. D., Davis, S., Evans, C., Jones, P., Gagliardi, F., Haynes, M., & Hunter, A. (2008). The effect of intensity-modulated radiotherapy on radiation-induced second malignancies. *International Journal of Radiation Oncology, Biology, Physics*, 70(5), 1530-1536. *Exclude: Treatment planning*
- Ruben, J. D., Lancaster, C. M., Jones, P., & Smith, R. L. (2011). A comparison of out-of-field dose and its constituent components for intensity-modulated radiation therapy versus conformal radiation therapy: Implications for carcinogenesis. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1458-1464. *Exclude: Treatment planning*
- Rudat, V., Alaradi, A. A., Mohamed, A., Ai-Yahya, K., & Altuwaijri, S. (2011). Tangential beam IMRT versus tangential beam 3D-CRT of the chest wall in postmastectomy breast cancer patients: A dosimetric comparison. *Radiation Oncology*, 6, 26. *Exclude: Included in systematic review (Hayes, Inc 2012 [whole breast])*

- Rudat, V., Munter, M., Rades, D., Grotz, K. A., Bajrovic, A., Haberkorn, U., . . . Debus, J. (2008). The effect of amifostine or IMRT to preserve the parotid function after radiotherapy of the head and neck region measured by quantitative salivary gland scintigraphy. *Radiotherapy & Oncology*, *89*(1), 71-80. *Exclude: Date*
- Russi, E. G., Pergolizzi, S., Lucio, F., & Ricardi, U. (2006). Adjuvant malignant mesothelioma radiotherapy: How many difficulties! in regard to: Allen et al. fatal pneumonitis associated with intensity-modulated radiation therapy for mesothelioma (int J radiat oncol biol phys 2006;65:640-645) and gupta et al. hemithoracic radiation therapy after pleurectomy/decortication for malignant pleural mesothelioma (int J radiat oncol biol phys 2005;63:1045-1052). *International Journal of Radiation Oncology, Biology, Physics*, *66*(4), 1273-1274. *Exclude: Study design (letter)*
- Rusthoven, K. E., Carter, D. L., Howell, K., Kercher, J. M., Henkenberns, P., Hunter, K. L., & Leonard, C. E. (2008). Accelerated partial-breast intensity-modulated radiotherapy results in improved dose distribution when compared with three-dimensional treatment-planning techniques. *International Journal of Radiation Oncology, Biology, Physics*, *70*(1), 296-302. *Exclude: Outcome not of interest (planning target volume)*
- Rusthoven, K. E., Raben, D., Ballonoff, A., Kane, M., Song, J. I., & Chen, C. (2008). Effect of radiation techniques in treatment of oropharynx cancer. *Laryngoscope*, *118*(4), 635-639. *Exclude: Date*
- Rutz, H. P., & Lomax, A. J. (2005). Donut-shaped high-dose configuration for proton beam radiation therapy. *Strahlentherapie Und Onkologie*, *181*(1), 49-53. *Exclude: Treatment scanning*
- Rwigema, J. C., Heron, D. E., Ferris, R. L., Andrade, R. S., Gibson, M. K., Yang, Y., . . . Burton, S. A. (2011). The impact of tumor volume and radiotherapy dose on outcome in previously irradiated recurrent squamous cell carcinoma of the head and neck treated with stereotactic body radiation therapy. *American Journal of Clinical Oncology*, *34*(4), 372-379. *Exclude: Intervention not of interest (SBRT)*
- Ryu, S., Fang Yin, F., Rock, J., Zhu, J., Chu, A., Kagan, E., . . . Kim, J. H. (2003). Image-guided and intensity-modulated radiosurgery for patients with spinal metastasis. *Cancer*, *97*(8), 2013-2018. *Exclude: Sample size*
- Saarilahti, K., Kouri, M., Collan, J., Kangasmaki, A., Atula, T., Joensuu, H., & Tenhunen, M. (2006). Sparing of the submandibular glands by intensity modulated radiotherapy in the treatment of head and neck cancer. *Radiotherapy & Oncology*, *78*(3), 270-275. *Exclude: Date*
- Safai, S., Bortfeld, T., & Engelsman, M. (2008). Comparison between the lateral penumbra of a collimated double-scattered beam and uncollimated scanning beam in proton radiotherapy. *Physics in Medicine & Biology*, *53*(6), 1729-1750. *Exclude: Treatment planning*
- Saibishkumar, E. P., Jha, N., Scrimger, R. A., MacKenzie, M. A., Daly, H., Field, C., . . . Parliament, M. B. (2007). Sparing the parotid glands and surgically transferred submandibular gland with helical tomotherapy in post-operative radiation of head and neck cancer: A planning study. *Radiotherapy & Oncology*, *85*(1), 98-104. *Exclude: Sample size*
- Saito, A. I., Lightsey, J., Li, J. G., Copeland, E. M., 3rd, Karasawa, K., Vargas, C. E., & Mendenhall, N. P. (2009). Accuracy of breast cancer axillary lymph node treatment plans based on 2-dimensional imaging: What we should know before interpreting 2-dimensional treatment-planning era studies. *American Journal of Clinical Oncology*, *32*(4), 387-395. *Exclude: Study size*
- Saito, A. I., Vargas, C., Morris, C. G., Lightsey, J., & Mendenhall, N. P. (2009). Differences between current and historical breast cancer axillary lymph node irradiation based on arm position: Implications for radiation oncologists. *American Journal of Clinical Oncology*, *32*(4), 381-386. *Exclude: Study size*
- Sakamoto, M., Mizowaki, T., Mitsumori, M., Takayama, K., Sasai, K., Norihisa, Y., . . . Hiraoka, M. (2010). Long-term outcomes of three-dimensional conformal radiation therapy combined with neoadjuvant hormonal therapy in Japanese patients with locally advanced prostate cancer. *International Journal of Clinical Oncology*, *15*(6), 571-577. *Exclude: Intervention not of interest (3D-CRT + neoadjuvant hormonal therapy)*

- Sakanaka, K., Mizowaki, T., & Hiraoka, M. (2012). Dosimetric advantage of intensity-modulated radiotherapy for whole ventricles in the treatment of localized intracranial germinoma. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), e273-80. *Exclude: Study size*
- Salama, J. K., Haddad, R. I., Kies, M. S., Busse, P. M., Dong, L., Brizel, D. M., . . . Garden, A. S. (2009). Clinical practice guidance for radiotherapy planning after induction chemotherapy in locoregionally advanced head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 725-733. *Exclude: Treatment planning*
- Salama, J. K., Stenson, K. M., List, M. A., Mell, L. K., Maccracken, E., Cohen, E. E., . . . Haraf, D. J. (2008). Characteristics associated with swallowing changes after concurrent chemotherapy and radiotherapy in patients with head and neck cancer. *Archives of Otolaryngology -- Head & Neck Surgery*, 134(10), 1060-1065. *Exclude: Date*
- Sale, C., & Moloney, P. (2011). Dose comparisons for conformal, IMRT and VMAT prostate plans. *Journal of Medical Imaging & Radiation Oncology*, 55(6), 611-621. *Exclude: Study size*
- Salem, A., Salem, A. F., Al-Ibraheem, A., Lataifeh, I., Almousa, A., & Jaradat, I. (2011). Evidence for the use PET for radiation therapy planning in patients with cervical cancer: A systematic review. *Hematology/oncology & Stem Cell Therapy*, 4(4), 173-181. *Exclude: Interventive not of interest (PET/PET-CT)*
- Salter, B. J., Fuss, M., Sarkar, V., Wang, B., Rassiah-Szegedi, P., Papanikolaou, N., . . . Shrieve, D. C. (2009). Optimization of isocenter location for intensity modulated stereotactic treatment of small intracranial targets. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 546-555. *Exclude: Study size*
- Saminathan, S., Manickam, R., & Chandraraj, V. (2011). Plan evaluation and dosimetric comparison of IMRT using AAPM TG119 test suites and recommendations. *Australasian Physical & Engineering Sciences in Medicine*, 34(1), 55-61. *Exclude: Treatment planning*
- Samuelian, J.M., Callister, M.D., Ashman, J.B., Young-Fadok, T.M., Borad, M.J., & Gunderson, L.L. (2012). Reduced acute bowel toxicity in patients treated with intensity-modulated radiotherapy for rectal cancer. *International Journal of Radiation Oncology, Biology, Physics*, 82(5), 1981-7. *Exclude: Study size (harms)*
- Samuels, M. A. (2007). In regards to munter et al. (int J radiat oncol biol phys 2007;67:651-659). *International Journal of Radiation Oncology, Biology, Physics*, 69(1), 318-9. *Exclude: Study design (letter)*
- Samuelsson, A., & Johansson, K. A. (2003). Intensity modulated radiotherapy treatment planning for dynamic multileaf collimator delivery: Influence of different parameters on dose distributions. *Radiotherapy & Oncology*, 66(1), 19-28. *Exclude: Treatment planning*
- Samuelsson, A., Mercke, C., & Johansson, K. A. (2003). Systematic set-up errors for IMRT in the head and neck region: Effect on dose distribution. *Radiotherapy & Oncology*, 66(3), 303-311. *Exclude: Treatment planning*
- Sanchez-Doblado, F., Andreo, P., Capote, R., Leal, A., Perucha, M., Arrans, R., . . . Carrasco, E. (2003). Ionization chamber dosimetry of small photon fields: A monte carlo study on stopping-power ratios for radiosurgery and IMRT beams. *Physics in Medicine & Biology*, 48(14), 2081-2099. *Exclude: Treatment planning*
- Sandhu, A., & Mundt, A. J. (2009). Radiation therapy for urologic malignancies in the elderly. *Urologic Oncology*, 27(6), 643-652. *Exclude: Study design (narrative review)*
- Sandler, H. M., Liu, P. Y., Dunn, R. L., Khan, D. C., Tropper, S. E., Sanda, M. G., & Mantz, C. A. (2010). Reduction in patient-reported acute morbidity in prostate cancer patients treated with 81-gy intensity-modulated radiotherapy using reduced planning target volume margins and electromagnetic tracking: Assessing the impact of margin reduction study. *Urology*, 75(5), 1004-1008. *Exclude: Treatment planning*
- Sanguineti, G., Califano, J., Stafford, E., Fox, J., Koch, W., Tufano, R., . . . Forastiere, A. (2009). Defining the risk of involvement for each neck nodal level in patients with early T-stage node-positive oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 74(5), 1356-1364. Retrieved *Exclude: Treatment planning*

- Sanguineti, G., Cavey, M. L., Endres, E. J., Franzone, P., Barra, S., Parker, B. C., . . . Vitale, V. (2006). Does treatment of the pelvic nodes with IMRT increase late rectal toxicity over conformal prostate-only radiotherapy to 76 Gy?. *Strahlentherapie Und Onkologie*, *182*(9), 543-549. *Exclude: Date*
- Sanguineti, G., Endres, E. J., Parker, B. C., Bicquart, C., Little, M., Chen, G., & Berilgen, J. (2008). Acute toxicity of whole-pelvis IMRT in 87 patients with localized prostate cancer. *Acta Oncologica*, *47*(2), 301-310. *Exclude: Date*
- Sanguineti, G., Gunn, G. B., Endres, E. J., Chaljub, G., Cheruvu, P., & Parker, B. (2008). Patterns of locoregional failure after exclusive IMRT for oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, *72*(3), 737-746. *Exclude: Date*
- Sanguineti, G., Little, M., Endres, E. J., Sormani, M. P., & Parker, B. C. (2008). Comparison of three strategies to delineate the bowel for whole pelvis IMRT of prostate cancer. *Radiotherapy & Oncology*, *88*(1), 95-101. *Exclude: Study size*
- Sankar, A., Ayyangar, K. M., Nehru, R. M., Kurup, P. G., Murali, V., Enke, C. A., & Velmurugan, J. (2006). Comparison of kodak EDR2 and gafchromic EBT film for intensity-modulated radiation therapy dose distribution verification. *Medical Dosimetry*, *31*(4), 273-282. *Exclude: Treatment planning*
- Sankaranarayanan, V., Ganesan, S., Oommen, S., Padmanaban, T. K., Stumpf, J., & Ayyangar, K. M. (2003). Study on dosimetric parameters for stereotactic radiosurgery and intensity-modulated radiotherapy. *Medical Dosimetry*, *28*(2), 85-90. *Exclude: Sample size*
- Santanam, L., Esthappan, J., Mutic, S., Klein, E. E., Goddu, S. M., Chaudhari, S., . . . Grigsby, P. W. (2008). Estimation of setup uncertainty using planar and MVCT imaging for gynecologic malignancies. *International Journal of Radiation Oncology, Biology, Physics*, *71*(5), 1511-1517. *Exclude: Treatment planning*
- Santoro, J. P., Yorke, E., Goodman, K. A., & Mageras, G. S. (2009). From phase-based to displacement-based gating: A software tool to facilitate respiration-gated radiation treatment. *Journal of Applied Clinical Medical Physics*, *10*(4), 2982. *Exclude: Study size*
- Sastre-Padro, M., van der Heide, U. A., & Welleweerd, H. (2004). An accurate calibration method of the multileaf collimator valid for conformal and intensity modulated radiation treatments. *Physics in Medicine & Biology*, *49*(12), 2631-2643. *Exclude: Treatment planning*
- Scarfone, C., Lavelly, W. C., Cmelak, A. J., Delbeke, D., Martin, W. H., Billheimer, D., & Hallahan, D. E. (2004). Prospective feasibility trial of radiotherapy target definition for head and neck cancer using 3-dimensional PET and CT imaging. *Journal of Nuclear Medicine*, *45*(4), 543-552. *Exclude: Study size*
- Schafer, M., Munter, M., Sterzing, F., Haring, P., Rhein, B., & Debus, J. (2005). Measurements of characteristics of time pattern in dose delivery in step-and-shoot IMRT. *Strahlentherapie Und Onkologie*, *181*(9), 587-594. *Exclude: Treatment planning*
- Schellenberg, D., Kim, J., Christman-Skieller, C., Chun, C. L., Columbo, L. A., Ford, J. M., . . . Koong, A. C. (2011). Single-fraction stereotactic body radiation therapy and sequential gemcitabine for the treatment of locally advanced pancreatic cancer. *International Journal of Radiation Oncology, Biology, Physics*, *81*(1), 181-188. *Exclude: Intervention not of interest (SBRT)*
- Scherrer, A., Kufer, K. H., Bortfeld, T., Monz, M., & Alonso, F. (2005). IMRT planning on adaptive volume structures - a decisive reduction in computational complexity. *Physics in Medicine & Biology*, *50*(9), 2033-2053. *Exclude: Study design (narrative)*
- Schmidhalter, D., Manser, P., Frei, D., Volken, W., & Fix, M. K. (2010). Comparison of monte carlo collimator transport methods for photon treatment planning in radiotherapy. *Medical Physics*, *37*(2), 492-504. *Exclude: Treatment planning*
- Schmitz, M. D., Padula, G. D., Chun, P. Y., & Davis, A. T. (2010). Normalization of prostate specific antigen in patients treated with intensity modulated radiotherapy for clinically localized prostate cancer. *Radiation Oncology*, *5*, 80. Retrieved *Exclude: Outcome not of interest (time to PSA normalization)*

- Schmuecking, M., Boltze, C., Geyer, H., Salz, H., Schilling, B., Wendt, T. G., . . . Marx, C. (2009). Dynamic MRI and CAD vs. choline MRS: Where is the detection level for a lesion characterisation in prostate cancer?. *International Journal of Radiation Biology*, 85(9), 814-824. *Exclude: Intervention not of interest (pre-interventional fused high resolution T2-weighted images)*
- Schneider, R. A., Schultze, J., Jensen, J. M., Hebbinghaus, D., Galalae, R., & Kimmig, B. N. (2007). 20 years of experience in static intensity-modulated total-body irradiation and lung toxicity. results in 257 consecutive patients. *Strahlentherapie Und Onkologie*, 183(10), 545-551. *Exclude: Intervention not of interest (total body irradiation)*
- Schneider, U., Lomax, A., Pemler, P., Besserer, J., Ross, D., Lombriser, N., & Kaser-Hotz, B. (2006). The impact of IMRT and proton radiotherapy on secondary cancer incidence. *Strahlentherapie Und Onkologie*, 182(11), 647-652. *Exclude: Treatment planning*
- Schoenfeld, G. O., Amdur, R. J., Morris, C. G., Li, J. G., Hinerman, R. W., & Mendenhall, W. M. (2008). Patterns of failure and toxicity after intensity-modulated radiotherapy for head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 377-385. *Exclude: Date*
- Schoenfeld, J. D., Sher, D. J., Norris, C. M., Jr, Haddad, R. I., Posner, M. R., Balboni, T. A., & Tishler, R. B. (2012). Salivary gland tumors treated with adjuvant intensity-modulated radiotherapy with or without concurrent chemotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 82(1), 308-314. *Exclude: Study size*
- Scholz, C., Nill, S., & Oelfke, U. (2003). Comparison of IMRT optimization based on a pencil beam and a superposition algorithm. *Medical Physics*, 30(7), 1909-1913. *Exclude: Treatment planning*
- Schreibmann, E., & Xing, L. (2004). Feasibility study of beam orientation class-solutions for prostate IMRT. *Medical Physics*, 31(10), 2863-2870. *Exclude: Treatment planning*
- Schroeder, T. M., Chintagumpala, M., Okcu, M. F., Chiu, J. K., Teh, B. S., Woo, S. Y., & Paulino, A. C. (2008). Intensity-modulated radiation therapy in childhood ependymoma. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 987-993. *Exclude: Date*
- Schubert, L. K., Gondi, V., Sengbusch, E., Westerly, D. C., Soisson, E. T., Paliwal, B. R., . . . Cannon, G. M. (2011). Dosimetric comparison of left-sided whole breast irradiation with 3DCRT, forward-planned IMRT, inverse-planned IMRT, helical tomotherapy, and topotherapy. *Radiotherapy & Oncology*, 100(2), 241-246. *Exclude: Study size*
- Schultze-Mosgau, S., Thorwarth, M., Wehrhan, F., Holter, W., Stachel, K. D., Grabenbauer, G., . . . Beck, J. D. (2005). Ewing sarcoma of the mandible in a child: Interdisciplinary treatment concepts and surgical reconstruction. *Journal of Craniofacial Surgery*, 16(6), 1140-1146. *Exclude: Study size*
- Schulz, R. J., & Kagan, A. R. (2002). On the role of intensity-modulated radiation therapy in radiation oncology. *Medical Physics*, 29(7), 1473-1482. *Exclude: Study design (narrative review)*
- Schulze, D., Liang, J., Yan, D., & Zhang, T. (2009). Comparison of various online IGRT strategies: The benefits of online treatment plan re-optimization. *Radiotherapy & Oncology*, 90(3), 367-376. *Exclude: Study size*
- Schulz-Ertner, D., Didinger, B., Nikoghosyan, A., Jakel, O., Zuna, I., Wannemacher, M., & Debus, J. (2003). Optimization of radiation therapy for locally advanced adenoid cystic carcinomas with infiltration of the skull base using photon intensity-modulated radiation therapy (IMRT) and a carbon ion boost. *Strahlentherapie Und Onkologie*, 179(5), 345-351. *Exclude: Sample size*
- Schulz-Ertner, D., Haberer, T., Scholz, M., Thilmann, C., Wenz, F., Jakel, O., . . . Debus, J. (2002). Acute radiation-induced toxicity of heavy ion radiotherapy delivered with intensity modulated pencil beam scanning in patients with base of skull tumors. *Radiotherapy & Oncology*, 64(2), 189-195. *Exclude: Intervention not of interest (proton therapy)*



- Schulz-Ertner, D., Nikoghosyan, A., Didinger, B., Karger, C. P., Jakel, O., Wannenmacher, M., & Debus, J. (2003). Treatment planning intercomparison for spinal chordomas using intensity-modulated photon radiation therapy (IMRT) and carbon ions. *Physics in Medicine & Biology*, 48(16), 2617-2631. *Exclude: Treatment planning*
- Schulz-Ertner, D., Nikoghosyan, A., Jakel, O., Haberer, T., Kraft, G., Scholz, M., . . . Debus, J. (2003). Feasibility and toxicity of combined photon and carbon ion radiotherapy for locally advanced adenoid cystic carcinomas. *International Journal of Radiation Oncology, Biology, Physics*, 56(2), 391-398. *Exclude: Sample size*
- Schulz-Ertner, D., Nikoghosyan, A., Thilmann, C., Haberer, T., Jakel, O., Karger, C., . . . Debus, J. (2003). Carbon ion radiotherapy for chordomas and low-grade chondrosarcomas of the skull base. results in 67 patients. *Strahlentherapie Und Onkologie*, 179(9), 598-605. *Exclude: Intervention not of interest (carbon ion radiotherapy)*
- Schwartz, D. L., Ford, E., Rajendran, J., Yueh, B., Coltrera, M. D., Virgin, J., . . . Laramore, G. E. (2005). FDG-PET/CT imaging for preradiotherapy staging of head-and-neck squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 61(1), 129-136. *Exclude: Intervention not of interest (FDG-PET for preradiotherapy staging)*
- Schwartz, D. L., Hutcheson, K., Barringer, D., Tucker, S. L., Kies, M., Holsinger, F. C., . . . Lewin, J. S. (2010). Candidate dosimetric predictors of long-term swallowing dysfunction after oropharyngeal intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 78(5), 1356-1365. Retrieved *Exclude: Treatment planning*
- Schwartz, D. L., Rana, V., Shaw, S., Yazbeck, C., Ang, K. K., Morrison, W. H., . . . Sherman, S. I. (2008). Postoperative radiotherapy for advanced medullary thyroid cancer--local disease control in the modern era. *Head & Neck*, 30(7), 883-888. *Exclude: Outcomes not specific to IMRT*
- Schwartz, M., Vuong, T., Ballivy, O., Parker, W., & Patrocinio, H. (2007). Accelerated radiotherapy with simultaneous integrated boost fractionation and intensity-modulated radiotherapy for advanced head and neck cancer. *Otolaryngology - Head & Neck Surgery*, 136(4), 549-555. *Exclude: Date*
- Schwarz, J. K., Wahab, S., & Grigsby, P. W. (2011). Prospective phase I-II trial of helical tomotherapy with or without chemotherapy for postoperative cervical cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1258-1263. *Exclude: Comparator not of interest (brachytherapy)*
- Schwarz, M., Alber, M., Lebesque, J. V., Mijnheer, B. J., & Damen, E. M. (2005). Dose heterogeneity in the target volume and intensity-modulated radiotherapy to escalate the dose in the treatment of non-small-cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 62(2), 561-570. *Exclude: Study size*
- Schwarz, M., Bos, L. J., Mijnheer, B. J., Lebesque, J. V., & Damen, E. M. (2003). Importance of accurate dose calculations outside segment edges in intensity modulated radiotherapy treatment planning. *Radiotherapy & Oncology*, 69(3), 305-314. *Exclude: Treatment size*
- Schwarz, M., Pierelli, A., Fiorino, C., Fellin, F., Cattaneo, G. M., Cozzarini, C., . . . Widesott, L. (2011). Helical tomotherapy and intensity modulated proton therapy in the treatment of early stage prostate cancer: A treatment planning comparison. *Radiotherapy & Oncology*, 98(1), 74-80. *Exclude: Study size*
- Scorsetti, M., Bignardi, M., Alongi, F., Fogliata, A., Mancosu, P., Navarria, P., . . . Cozzi, L. (2011). Stereotactic body radiation therapy for abdominal targets using volumetric intensity modulated arc therapy with RapidArc: Feasibility and clinical preliminary results. *Acta Oncologica*, 50(4), 528-538. *Exclude: Intervention not of interest (SBRT)*
- Scorsetti, M., Bignardi, M., Clivio, A., Cozzi, L., Fogliata, A., Lattuada, P., . . . Santoro, A. (2010). Volumetric modulation arc radiotherapy compared with static gantry intensity-modulated radiotherapy for malignant pleural mesothelioma tumor: A feasibility study. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 942-949. *Exclude: Study size*

- Scorsetti, M., Fogliata, A., Castiglioni, S., Bressi, C., Bignardi, M., Navarria, P., . . . Santoro, A. (2010). Early clinical experience with volumetric modulated arc therapy in head and neck cancer patients. *Radiation Oncology*, *5*, 93. Retrieved *Exclude: Study size*
- Selvaraj, R. N., Beriwal, S., Pourarian, R. J., Lalonde, R. J., Chen, A., Mehta, K., . . . Heron, D. E. (2007). Clinical implementation of tangential field intensity modulated radiation therapy (IMRT) using sliding window technique and dosimetric comparison with 3D conformal therapy (3DCRT) in breast cancer. *Medical Dosimetry*, *32*(4), 299-304. *Exclude: Treatment planning*
- Senthi, S., Gill, S. S., Haworth, A., Kron, T., Cramb, J., Rolfo, A., . . . Foroudi, F. (2012). Benchmarking dosimetric quality assessment of prostate intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, *82*(2), 998-1005. *Exclude: Treatment planning*
- Seppala, J., Kulmala, J., Lindholm, P., & Minn, H. (2010). A method to improve target dose homogeneity of craniospinal irradiation using dynamic split field IMRT. *Radiotherapy & Oncology*, *96*(2), 209-215. *Exclude: Study size*
- Serago, C. F., Buskirk, S. J., Igel, T. C., Gale, A. A., Serago, N. E., & Earle, J. D. (2006). Comparison of daily megavoltage electronic portal imaging or kilovoltage imaging with marker seeds to ultrasound imaging or skin marks for prostate localization and treatment positioning in patients with prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, *65*(5), 1585-1592. *Exclude: Treatment planning*
- Sethi, R. A., No, H. S., Jozsef, G., Ko, J. P., & Formenti, S. C. (2012). Comparison of three-dimensional versus intensity-modulated radiotherapy techniques to treat breast and axillary level III and supraclavicular nodes in a prone versus supine position. *Radiotherapy & Oncology*, *102*(1), 74-81. *Exclude: Study size*
- Seung, S., Bae, J., Solhjem, M., Bader, S., Gannett, D., Hansen, E. K., . . . Cha, C. (2008). Intensity-modulated radiotherapy for head-and-neck cancer in the community setting. *International Journal of Radiation Oncology, Biology, Physics*, *72*(4), 1075-1081. *Exclude: Date*
- Seuntjens, J., & Verhaegen, F. (2003). Comments on 'ionization chamber dosimetry of small photon fields: A monte carlo study on stopping-power ratios for radiosurgery and IMRT beams'. *Physics in Medicine & Biology*, *48*(21), 43-45. *Exclude: Study design (comment)*
- Shaffer, R., Morris, W. J., Moiseenko, V., Welsh, M., Crumley, C., Nakano, S., . . . Otto, K. (2009). Volumetric modulated arc therapy and conventional intensity-modulated radiotherapy for simultaneous maximal intraprostatic boost: A planning comparison study. *Clinical Oncology (Royal College of Radiologists)*, *21*(5), 401-407. *Exclude: Study size*
- Shaffer, R., Nichol, A. M., Vollans, E., Fong, M., Nakano, S., Moiseenko, V., . . . Otto, K. (2010). A comparison of volumetric modulated arc therapy and conventional intensity-modulated radiotherapy for frontal and temporal high-grade gliomas. *International Journal of Radiation Oncology, Biology, Physics*, *76*(4), 1177-1184. *Exclude: Study size*
- Shaffer, R., Vollans, E., Vellani, R., Welsh, M., Moiseenko, V., & Goddard, K. (2011). A radiotherapy planning study of RapidArc, intensity modulated radiotherapy, three-dimensional conformal radiotherapy, and parallel opposed beams in the treatment of pediatric retroperitoneal tumors. *Pediatric Blood & Cancer*, *56*(1), 16-23. *Exclude: Study size*
- Shaikh, M., Burmeister, J., Joiner, M., Pandya, S., Zhao, B., & Liu, Q. (2010). Biological effect of different IMRT delivery techniques: SMLC, DMLC, and helical tomotherapy. *Medical Physics*, *37*(2), 762-770. *Exclude: Treatment planning*
- Shaitelman, S. F., Kim, L. H., Yan, D., Martinez, A. A., Vicini, F. A., & Grills, I. S. (2011). Continuous arc rotation of the couch therapy for the delivery of accelerated partial breast irradiation: A treatment planning analysis. *International Journal of Radiation Oncology, Biology, Physics*, *80*(3), 771-778. *Exclude: Study size*

- Shakam, A., Scrimger, R., Liu, D., Mohamed, M., Parliament, M., Field, G. C., . . . Ghosh, S. (2011). Dose-volume analysis of locoregional recurrences in head and neck IMRT, as determined by deformable registration: A prospective multi-institutional trial. *Radiotherapy & Oncology*, *99*(2), 101-107. *Exclude: Treatment planning*
- Shao, Z. Y., Tang, Z. S., Yan, C., Jiang, Y. T., Ma, R., Liu, Z., & Huang, Z. W. (2011). Effects of intensity-modulated radiotherapy on human oral microflora. *Journal of Radiation Research*, *52*(6), 834-839. Retrieved *Exclude: Study size*
- Sharma, D. S., Gupta, T., Jalali, R., Master, Z., Phurailatpam, R. D., & Sarin, R. (2009). High-precision radiotherapy for craniospinal irradiation: Evaluation of three-dimensional conformal radiotherapy, intensity-modulated radiation therapy and helical TomoTherapy. *British Journal of Radiology*, *82*(984), 1000-1009. *Exclude: Study size*
- Sharma, D. S., Mhatre, V., Heigrujam, M., Talapatra, K., & Mallik, S. (2010). Portal dosimetry for pretreatment verification of IMRT plan: A comparison with 2D ion chamber array. *Journal of Applied Clinical Medical Physics*, *11*(4), 3268. *Exclude: Treatment planning*
- Sharma, N. K., Li, T., Chen, D. Y., Pollack, A., Horwitz, E. M., & Buyyounouski, M. K. (2011). Intensity-modulated radiotherapy reduces gastrointestinal toxicity in patients treated with androgen deprivation therapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, *80*(2), 437-444. *Exclude: Included in De Neve (2012)*
- Sheinbein, C., Teh, B. S., Mai, W. Y., Grant, W., Paulino, A., & Butler, E. B. (2010). Prostate-specific antigen bounce after intensity-modulated radiotherapy for prostate cancer. *Urology*, *76*(3), 728-733. Retrieved *Exclude: Outcome not of interest (PSA bounce)*
- Sheng, K., Chow, M. C., Hunter, G., Larner, J. M., & Read, P. W. (2008). Is daily CT image guidance necessary for nasal cavity and nasopharyngeal radiotherapy: An investigation based on helical tomotherapy. *Journal of Applied Clinical Medical Physics*, *9*(1), 2686. *Exclude: Study size*
- Sheng, K., Molloy, J. A., Larner, J. M., & Read, P. W. (2007). A dosimetric comparison of non-coplanar IMRT versus helical tomotherapy for nasal cavity and paranasal sinus cancer. *Radiotherapy & Oncology*, *82*(2), 174-178. *Exclude: Study size*
- Sheng, K., Molloy, J. A., & Read, P. W. (2006). Intensity-modulated radiation therapy (IMRT) dosimetry of the head and neck: A comparison of treatment plans using linear accelerator-based IMRT and helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, *65*(3), 917-923. *Exclude: Study size*
- Sher, D. J., Balboni, T. A., Haddad, R. I., Norris, C. M., Jr, Posner, M. R., Wirth, L. J., . . . Tishler, R. B. (2011). Efficacy and toxicity of chemoradiotherapy using intensity-modulated radiotherapy for unknown primary of head and neck. *International Journal of Radiation Oncology, Biology, Physics*, *80*(5), 1405-1411. *Exclude: Study size*
- Shi, A., Zhu, G., Wu, H., Yu, R., Li, F., & Xu, B. (2010). Analysis of clinical and dosimetric factors associated with severe acute radiation pneumonitis in patients with locally advanced non-small cell lung cancer treated with concurrent chemotherapy and intensity-modulated radiotherapy. *Radiation Oncology*, *5*, 35. *Exclude: Treatment planning*
- Shi, C., Penagaricano, J., & Papanikolaou, N. (2008). Comparison of IMRT treatment plans between linac and helical tomotherapy based on integral dose and inhomogeneity index. *Medical Dosimetry*, *33*(3), 215-221. *Exclude: Treatment planning*
- Shi, W., Li, J. G., Zlotecki, R. A., Yeung, A., Newlin, H., Palta, J., . . . Olivier, K. (2011). Evaluation of kV cone-beam ct performance for prostate IGRT: A comparison of automatic grey-value alignment to implanted fiducial-marker alignment. *American Journal of Clinical Oncology*, *34*(1), 16-21. Retrieved *Exclude: Treatment planning*
- Shiraishi, K., Nakagawa, K., Yamashita, H., Nakamura, N., Tago, M., & Ohtomo, K. (2006). Treatment planning and dosimetry of a multi-axis dynamic arc technique for prostate cancer: A comparison with IMRT. *Radiation Medicine*, *24*(1), 17-22. *Exclude: Treatment planning*

- Shiu, A., Parker, B., Ye, J. S., & Lii, J. (2003). An integrated treatment delivery system for CSRS and CSRT and clinical applications. *Journal of Applied Clinical Medical Physics*, 4(4), 261-273. *Exclude: Treatment planning*
- Shou, Z., Yang, Y., Cotrutz, C., Levy, D., & Xing, L. (2005). Quantitation of the a priori dosimetric capabilities of spatial points in inverse planning and its significant implication in defining IMRT solution space. *Physics in Medicine & Biology*, 50(7), 1469-1482. *Exclude: Treatment planning*
- Shoushtari, A., Saylor, D., Kerr, K. L., Sheng, K., Thomas, C., Jameson, M., . . . Read, P. (2011). Outcomes of patients with head-and-neck cancer of unknown primary origin treated with intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 81(3), e83-91. *Exclude: Study size*
- Showalter, T. N., Ohri, N., Teti, K. G., Foley, K. A., Keith, S. W., Trabulsi, E. J., . . . Gomella, L. G. (2012). Physician beliefs and practices for adjuvant and salvage radiation therapy after prostatectomy. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), e233-8. *Exclude: Population not of interest (physicians)*
- Shueng, P. W., Shen, B. J., Wu, L. J., Liao, L. J., Hsiao, C. H., Lin, Y. C., . . . Hsieh, C. H. (2011). Concurrent image-guided intensity modulated radiotherapy and chemotherapy following neoadjuvant chemotherapy for locally advanced nasopharyngeal carcinoma. *Radiation Oncology*, 6, 95. *Exclude: Study size*
- Siddiqui, F., Shi, C., Papanikolaou, N., & Fuss, M. (2008). Image-guidance protocol comparison: Supine and prone set-up accuracy for pelvic radiation therapy. *Acta Oncologica*, 47(7), 1344-1350. *Exclude: Treatment planning*
- Sidler, D., Thum, P., Winterhalder, R., Huber, G., & Haerle, S. K. (2010). Undifferentiated carcinoma of nasopharyngeal type (UCNT): A swiss single-institutional experience during 1990-2005. *Swiss Medical Weekly*, 140(19-20), 273-279. *Exclude: Outcome not of interest (risk factors and prognostic determinants)*
- Siebers, J. V., Keall, P. J., Kim, J. O., & Mohan, R. (2002). A method for photon beam monte carlo multileaf collimator particle transport. *Physics in Medicine & Biology*, 47(17), 3225-3249. *Exclude: Treatment planning*
- Siebers, J. V., Kim, J. O., Ko, L., Keall, P. J., & Mohan, R. (2004). Monte carlo computation of dosimetric amorphous silicon electronic portal images. *Medical Physics*, 31(7), 2135-2146. *Exclude: Treatment planning*
- Siebert, F. A., Born, T., Haring, S., Seefeld, F., & Kovacs, G. (2006). A dosimetric analysis of interstitial intensity modulated implants for pelvic recurrences, base of tongue and orbita tumors with specific references to the ICRU-58. *Radiotherapy & Oncology*, 79(3), 298-303. *Exclude: Treatment planning*
- Siker, M. L., Tome, W. A., & Mehta, M. P. (2006). Tumor volume changes on serial imaging with megavoltage CT for non-small-cell lung cancer during intensity-modulated radiotherapy: How reliable, consistent, and meaningful is the effect?. *International Journal of Radiation Oncology, Biology, Physics*, 66(1), 135-141. *Exclude: Outcomes not of interest (tumor volume)*
- Simon, T., Hero, B., Bongartz, R., Schmidt, M., Muller, R. P., & Berthold, F. (2006). Intensified external-beam radiation therapy improves the outcome of stage 4 neuroblastoma in children > 1 year with residual local disease. *Strahlentherapie Und Onkologie*, 182(7), 389-394. *Exclude: Intervention not of interest (EBRT)*
- Simone, C. B., 2nd, Ly, D., Dan, T. D., Ondos, J., Ning, H., Belard, A., . . . Simone, N. L. (2011). Comparison of intensity-modulated radiotherapy, adaptive radiotherapy, proton radiotherapy, and adaptive proton radiotherapy for treatment of locally advanced head and neck cancer. *Radiotherapy & Oncology*, 101(3), 376-382. *Exclude: Study size*
- Singh, A. K., Guion, P., Sears-Crouse, N., Ullman, K., Smith, S., Albert, P. S., . . . Ning, H. (2007). Simultaneous integrated boost of biopsy proven, MRI defined dominant intra-prostatic lesions to 95 gray with IMRT: Early results of a phase I NCI study. *Radiation Oncology*, 2, 36. *Exclude: Study size*
- Siochi, R. A. (2004). Modifications to the IMFAST leaf sequencing optimization algorithm. *Medical Physics*, 31(12), 3267-3278. *Exclude: Treatment planning*
- Skala, M., Holloway, L., Bailey, M., & Kneebone, A. (2005). Australia-wide comparison of intensity modulated radiation therapy prostate plans. *Australasian Radiology*, 49(3), 222-229. *Exclude: Treatment planning*

- Skala, M., Rosewall, T., Dawson, L., Divanbeigi, L., Lockwood, G., Thomas, C., . . . Catton, C. (2007). Patient-assessed late toxicity rates and principal component analysis after image-guided radiation therapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 68(3), 690-698. *Exclude: Date*
- Skinner, W. K., Muse, E. D., Yaparpalvi, R., Guha, C., Garg, M. K., & Kalnicki, S. (2009). Obtaining normal tissue constraints using intensity modulated radiotherapy (IMRT) in patients with oral cavity, oropharyngeal, and laryngeal carcinoma. *Medical Dosimetry*, 34(4), 279-284. *Exclude: Study size*
- Slosarek, K., Zajusz, A., & Szlag, M. (2008). Comparison of traditional and simultaneous IMRT boost technique basing on therapeutic gain calculation. *Medical Dosimetry*, 33(4), 299-302. *Exclude: Treatment planning*
- Small, W., Jr, Mell, L. K., Anderson, P., Creutzberg, C., De Los Santos, J., Gaffney, D., . . . Mundt, A. J. (2008). Consensus guidelines for delineation of clinical target volume for intensity-modulated pelvic radiotherapy in postoperative treatment of endometrial and cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(2), 428-434. *Exclude: Treatment planning*
- Smeenk, R. J., Teh, B. S., Butler, E. B., van Lin, E. N., & Kaanders, J. H. (2010). Is there a role for endorectal balloons in prostate radiotherapy? A systematic review. *Radiotherapy & Oncology*, 95(3), 277-282. *Exclude: Intervention not of interest (endorectal balloons)*
- Smeenk, R. J., van Lin, E. N., van Kollenburg, P., Kunze-Busch, M., & Kaanders, J. H. (2009). Anal wall sparing effect of an endorectal balloon in 3D conformal and intensity-modulated prostate radiotherapy. *Radiotherapy & Oncology*, 93(1), 131-136. *Exclude: Intervention not of interest (endorectal balloons)*
- Smith, W., Menon, G., Wolfe, N., Ploquin, N., Trotter, T., & Pudney, D. (2010). IMRT for the breast: A comparison of tangential planning techniques. *Physics in Medicine & Biology*, 55(4), 1231-1241. *Exclude: Treatment planning*
- Snir, J. A., Battista, J. J., Bauman, G., & Yartsev, S. (2011). Evaluation of inter-fraction prostate motion using kilovoltage cone beam computed tomography during radiotherapy. *Clinical Oncology (Royal College of Radiologists)*, 23(9), 625-631. *Exclude: Treatment planning*
- Snyder, M., Joiner, M. C., Konski, A., Bossenberger, T., & Burmeister, J. (2011). Dose escalation in prostate cancer using intensity modulated neutron radiotherapy. *Radiotherapy & Oncology*, 99(2), 201-206. *Exclude: Treatment planning*
- Sohn, J. W., Dempsey, J. F., Suh, T. S., & Low, D. A. (2003). Analysis of various beamlet sizes for IMRT with 6 MV photons. *Medical Physics*, 30(9), 2432-2439. *Exclude: Treatment planning*
- Soisson, E. T., Tome, W. A., Richards, G. M., & Mehta, M. P. (2006). Comparison of linac based fractionated stereotactic radiotherapy and tomotherapy treatment plans for skull-base tumors. *Radiotherapy & Oncology*, 78(3), 313-321. *Exclude: Study size*
- Solares, C. A., Fakhri, S., Batra, P. S., Lee, J., & Lanza, D. C. (2005). Transnasal endoscopic resection of lesions of the clivus: A preliminary report. *Laryngoscope*, 115(11), 1917-1922. *Exclude: Study size*
- Sondergaard, J., Hoyer, M., Petersen, J. B., Wright, P., Grau, C., & Muren, L. P. (2009). The normal tissue sparing obtained with simultaneous treatment of pelvic lymph nodes and bladder using intensity-modulated radiotherapy. *Acta Oncologica*, 48(2), 238-244. *Exclude: Study size*
- Song, W. Y., Huh, S. N., Liang, Y., White, G., Nichols, R. C., Watkins, W. T., . . . Mell, L. K. (2010). Dosimetric comparison study between intensity modulated radiation therapy and three-dimensional conformal proton therapy for pelvic bone marrow sparing in the treatment of cervical cancer. *Journal of Applied Clinical Medical Physics*, 11(4), 3255. *Exclude: Study size*
- Song, Y., Chan, M. F., Burman, C., & Cann, D. (2008). Comparison of two treatment approaches for prostate cancer: Intensity-modulated radiation therapy combined with 125I seed-implant brachytherapy or 125I seed-implant brachytherapy alone. *Journal of Applied Clinical Medical Physics*, 9(2), 2283. *Exclude: Treatment planning*
- Soto, D. E., Kessler, M. L., Piert, M., & Eisbruch, A. (2008). Correlation between pretreatment FDG-PET biological target volume and anatomical location of failure after radiation therapy for head and neck cancers. *Radiotherapy & Oncology*, 89(1), 13-18. *Exclude: Date*

- Soukup, M., & Alber, M. (2007). Influence of dose engine accuracy on the optimum dose distribution in intensity-modulated proton therapy treatment plans. *Physics in Medicine & Biology*, 52(3), 725-740. *Exclude: Treatment planning*
- South, C. P., Khoo, V. S., Naismith, O., Norman, A., & Dearnaley, D. P. (2008). A comparison of treatment planning techniques used in two randomised UK external beam radiotherapy trials for localised prostate cancer. *Clinical Oncology (Royal College of Radiologists)*, 20(1), 15-21. *Exclude: Study size*
- Sovik, A., Malinen, E., Skogmo, H. K., Bentzen, S. M., Bruland, O. S., & Olsen, D. R. (2007). Radiotherapy adapted to spatial and temporal variability in tumor hypoxia. *International Journal of Radiation Oncology, Biology, Physics*, 68(5), 1496-1504. *Exclude: Treatment planning*
- Spalding, A. C., Jee, K. W., Vineberg, K., Jablonowski, M., Fraass, B. A., Pan, C. C., . . . Ben-Josef, E. (2007). Potential for dose-escalation and reduction of risk in pancreatic cancer using IMRT optimization with lexicographic ordering and gEUD-based cost functions. *Medical Physics*, 34(2), 521-529. *Exclude: Study size*
- Spalke, T., Craft, D., & Bortfeld, T. (2009). Analyzing the main trade-offs in multiobjective radiation therapy treatment planning databases. *Physics in Medicine & Biology*, 54(12), 3741-3754. *Exclude: Treatment planning*
- Sresty, N. V., Ramanajappa, T., Raju, A. K., Muralidhar, K. R., & Sudarshan, G. (2010). Acquisition of equal or better planning results with interstitial brachytherapy when compared with intensity-modulated radiotherapy in tongue cancers. *Brachytherapy*, 9(3), 235-238. *Exclude: Study size*
- Srivastava, S. P., Das, I. J., Kumar, A., & Johnstone, P. A. (2011). Dosimetric comparison of manual and beam angle optimization of gantry angles in IMRT. *Medical Dosimetry*, 36(3), 313-316. *Exclude: Study size*
- St Clair, W. H., Adams, J. A., Bues, M., Fullerton, B. C., La Shell, S., Kooy, H. M., . . . Tarbell, N. J. (2004). Advantage of protons compared to conventional X-ray or IMRT in the treatment of a pediatric patient with medulloblastoma. *International Journal of Radiation Oncology, Biology, Physics*, 58(3), 727-734. *Exclude: Treatment planning*
- Staab, A., Rutz, H. P., Ares, C., Timmermann, B., Schneider, R., Bolsi, A., . . . Hug, E. (2011). Spot-scanning-based proton therapy for extracranial chordoma. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), e489-96. *Exclude: Intervention not of interest (IMPT)*
- Stall, B., Zach, L., Ning, H., Ondos, J., Arora, B., Shankavaram, U., . . . Camphausen, K. (2010). Comparison of T2 and FLAIR imaging for target delineation in high grade gliomas. *Radiation Oncology*, 5, 5. *Exclude: Treatment planning*
- Stasi, M., Baiotto, B., Barboni, G., & Scielzo, G. (2004). The behavior of several microionization chambers in small intensity modulated radiotherapy fields. *Medical Physics*, 31(10), 2792-2795. *Exclude: Treatment planning*
- Stathakis, S., Price, R., Jr, & Ma, C. M. (2005). Dosimetry validation of treatment room shielding design. *Medical Physics*, 32(2), 448-454. *Exclude: Treatment planning*
- Stavrev, P., Hristov, D., Warkentin, B., Sham, E., Stavreva, N., & Fallone, B. G. (2003). Inverse treatment planning by physically constrained minimization of a biological objective function. *Medical Physics*, 30(11), 2948-2958. *Exclude: Treatment planning*
- Steneker, M., Lomax, A., & Schneider, U. (2006). Intensity modulated photon and proton therapy for the treatment of head and neck tumors. *Radiotherapy & Oncology*, 80(2), 263-267. *Exclude: Treatment planning*
- Stern, R. L., Perks, J. R., Pappas, C. T., Boggan, J. E., & Chen, A. Y. (2008). The option of linac-based radiosurgery in a gamma knife radiosurgery center. *Clinical Neurology & Neurosurgery*, 110(10), 968-972. *Exclude: Intervention not of interest (radiosurgery)*
- Sterzing, F., Herfarth, K., & Debus, J. (2007). IGRT with helical tomotherapy--effort and benefit in clinical routine. *Strahlentherapie Und Onkologie*, 183(Spec 2), 35-37. *Exclude: Treatment planning*

- Sterzing, F., Munter, M. W., Schafer, M., Haering, P., Rhein, B., Thilmann, C., & Debus, J. (2005). Radiobiological investigation of dose-rate effects in intensity-modulated radiation therapy. *Strahlentherapie Und Onkologie*, 181(1), 42-48. *Exclude: Population not of interest (human lymphoblasts (TK6) and human melanoma cells (MeWo))*
- Sterzing, F., Sroka-Perez, G., Schubert, K., Munter, M. W., Thieke, C., Huber, P., . . . Herfarth, K. K. (2008). Evaluating target coverage and normal tissue sparing in the adjuvant radiotherapy of malignant pleural mesothelioma: Helical tomotherapy compared with step-and-shoot IMRT. *Radiotherapy & Oncology*, 86(2), 251-257. *Exclude: Study size*
- Sterzing, F., Uhl, M., Hauswald, H., Schubert, K., Sroka-Perez, G., Chen, Y., . . . Oliveira, G. (2010). Dynamic jaws and dynamic couch in helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 76(4), 1266-1273. *Exclude: Study size*
- Stevens, C. W., Wong, P. F., Rice, D., Jeter, M., Forster, K., & Zhu, X. R. (2005). Treatment planning system evaluation for mesothelioma IMRT. *Lung Cancer*, 49(Suppl 1), S75-81. *Exclude: Treatment planning*
- Stewart, A. J., Lee, Y. K., & Saran, F. H. (2009). Comparison of conventional radiotherapy and intensity-modulated radiotherapy for post-operative radiotherapy for primary extremity soft tissue sarcoma. *Radiotherapy & Oncology*, 93(1), 125-130. *Exclude: Study size*
- Stewart, J., Lim, K., Kelly, V., Xie, J., Brock, K. K., Moseley, J., . . . Milosevic, M. (2010). Automated weekly replanning for intensity-modulated radiotherapy of cervix cancer. *International Journal of Radiation Oncology, Biology, Physics*, 78(2), 350-358. *Exclude: Treatment planning*
- St-Hilaire, J., Lavoie, C., Dagnault, A., Beaulieu, F., Morin, F., Beaulieu, L., & Tremblay, D. (2011). Functional avoidance of lung in plan optimization with an aperture-based inverse planning system. *Radiotherapy & Oncology*, 100(3), 390-395. *Exclude: Treatment planning*
- St-Hilaire, J., Sevigny, C., Beaulieu, F., Germain, F., Lavoie, C., Dagnault, A., . . . Beaulieu, L. (2009). Dose escalation in the radiotherapy of non-small-cell lung cancer with aperture-based intensity modulation and photon beam energy optimization for non-preselected patients. *Radiotherapy & Oncology*, 91(3), 342-348. *Exclude: Study size*
- Stieler, F., Wolff, D., Bauer, L., Wertz, H. J., Wenz, F., & Lohr, F. (2011). Reirradiation of spinal column metastases: Comparison of several treatment techniques and dosimetric validation for the use of VMAT. *Strahlentherapie Und Onkologie*, 187(7), 406-415. *Exclude: Study size*
- Stieler, F., Wolff, D., Schmid, H., Welzel, G., Wenz, F., & Lohr, F. (2011). A comparison of several modulated radiotherapy techniques for head and neck cancer and dosimetric validation of VMAT. *Radiotherapy & Oncology*, 101(3), 388-393. *Exclude: Study size*
- Stock, M., Dorr, W., Stromberger, C., Mock, U., Koizar, S., Potter, R., & Georg, D. (2010). Investigations on parotid gland recovery after IMRT in head and neck tumor patients. *Strahlentherapie Und Onkologie*, 186(12), 665-671. *Exclude: Study size*
- Strege, R. J., Kovacs, G., Meyer, J. E., Holland, D., Claviez, A., Mehdorn, M. H., & Interdisciplinary Group of Orbitazentrum UK,S.-H. (2009). Perioperative intensity-modulated brachytherapy for refractory orbital rhabdomyosarcomas in children. *Strahlentherapie Und Onkologie*, 185(12), 789-798. *Exclude: Study size*
- Strigari, L., Arcangeli, G., Arcangeli, S., & Benassi, M. (2009). Mathematical model for evaluating incidence of acute rectal toxicity during conventional or hypofractionated radiotherapy courses for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 73(5), 1454-1460. *Exclude: Study design (mathematical model)*
- Stromberger, C., Kom, Y., Kawgan-Kagan, M., Mensing, T., Jahn, U., Schneider, A., . . . Marnitz, S. (2010). Intensity-modulated radiotherapy in patients with cervical cancer. an intra-individual comparison of prone and supine positioning. *Radiation Oncology*, 5, 63. *Exclude: Study size*

- Studer, G., & Glanzmann, C. (2007). In regards to dr. garden et al. (int J radiat oncol biol phys 2007;67:438-444). *International Journal of Radiation Oncology, Biology, Physics*, 68(1), 313-314. *Exclude: Study design (letter)*
- Studer, G., Glanzmann, C., Studer, S. P., Gratz, K. W., Bredell, M., Locher, M., . . . Zwahlen, R. A. (2011). Risk-adapted dental care prior to intensity-modulated radiotherapy (IMRT). *Schweizer Monatsschrift Fur Zahnmedizin*, 121(3), 216-229. *Exclude: Study design (narrative review of hospital use of IMRT)*
- Studer, G., Luetolf, U. M., & Glanzmann, C. (2007). Letter by G. studer, U. M. luetolf, C. glanzmann on the comment by H. christiansen & C. F. hess. locoregional failure analysis in head and neck cancer patients treated with IMRT. *Strahlentherapie Und Onkologie*, 183(10), 581-582. *Exclude: Study design (letter)*
- Studer, G., Lutolf, U. M., El-Bassiouni, M., Rousson, V., & Glanzmann, C. (2007). Volumetric staging (VS) is superior to TNM and AJCC staging in predicting outcome of head and neck cancer treated with IMRT. *Acta Oncologica*, 46(3), 386-394. *Exclude: Treatment planning*
- Studer, G., Rordorf, T., & Glanzmann, C. (2011). Impact of tumor volume and systemic therapy on outcome in patients undergoing IMRT for large volume head neck cancer. *Radiation Oncology*, 6, 120. *Exclude: Outcomes not of interest (total gross tumor volume)*
- Studer, G., Studer, S. P., Zwahlen, R. A., Huguenin, P., Gratz, K. W., Lutolf, U. M., & Glanzmann, C. (2006). Osteoradionecrosis of the mandible: Minimized risk profile following intensity-modulated radiation therapy (IMRT). *Strahlentherapie Und Onkologie*, 182(5), 283-288. *Exclude: Date*
- Studer, G., Zwahlen, R. A., Graetz, K. W., Davis, B. J., & Glanzmann, C. (2007). IMRT in oral cavity cancer. *Radiation Oncology*, 2, 16. *Exclude: Date*
- Studer, G. M., & Glanzmann, C. (2008). Patterns of failure and toxicity after intensity-modulated radiotherapy for head and neck cancer: In regard to schoenfeld et al. (int J radiat oncol biol phys 2008;71:377-385). *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1271-1272. *Exclude: Study design (comment)*
- Subramanian, T. S. (2002). Linear accelerators used for IMRT should be designed as small field, high intensity, intermediate energy units. for the proposition. *Medical Physics*, 29(11), 2526-2527. *Exclude: Study design (commentary)*
- Suchowerska, N., Ebert, M. A., Zhang, M., & Jackson, M. (2005). In vitro response of tumour cells to non-uniform irradiation. *Physics in Medicine & Biology*, 50(13), 3041-3051. *Exclude: Treatment planning*
- Sugie, C., Shibamoto, Y., Ayakawa, S., Mimura, M., Komai, K., Ishii, M., . . . Oda, K. (2011). Craniospinal irradiation using helical tomotherapy: Evaluation of acute toxicity and dose distribution. *Technology in Cancer Research & Treatment*, 10(2), 187-195. *Exclude: Study size*
- Suh, Y., Weiss, E., Zhong, H., Fatyga, M., Siebers, J. V., & Keall, P. J. (2008). A deliverable four-dimensional intensity-modulated radiation therapy-planning method for dynamic multileaf collimator tumor tracking delivery. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1526-1536. *Exclude: Study size*
- Sulman, E. P., Schwartz, D. L., Le, T. T., Ang, K. K., Morrison, W. H., Rosenthal, D. I., . . . Garden, A. S. (2009). IMRT reirradiation of head and neck cancer-disease control and morbidity outcomes. *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 399-409. *Exclude: Date*
- Sultanem, K., Patrocino, H., Lambert, C., Corns, R., Leblanc, R., Parker, W., . . . Souhami, L. (2004). The use of hypofractionated intensity-modulated irradiation in the treatment of glioblastoma multiforme: Preliminary results of a prospective trial. *International Journal of Radiation Oncology, Biology, Physics*, 58(1), 247-252. *Exclude: Included in systematic review (Amelio 2010)*
- Sun, M., & Ma, L. (2006). Treatments of exceptionally large prostate cancer patients with low-energy intensity-modulated photons. *Journal of Applied Clinical Medical Physics*, 7(4), 43-49. *Exclude: Treatment planning*



- Sun, W., Leong, C. N., Zhang, Z., & Lu, J. J. (2010). Proposing the lymphatic target volume for elective radiation therapy for pancreatic cancer: A pooled analysis of clinical evidence. *Radiation Oncology*, 5, 28. *Exclude: Outcome not of interest (pattern of lymph node metastasis)*
- Sun, X., & Xia, P. (2004). A new smoothing procedure to reduce delivery segments for static MLC-based IMRT planning. *Medical Physics*, 31(5), 1158-1165. *Exclude: Treatment planning*
- Sun, X., Xia, P., & Yu, N. (2004). Effects of the intensity levels and beam map resolutions on static IMRT plans. *Medical Physics*, 31(9), 2402-2411. *Exclude: Treatment planning*
- Sun, X. N., Wang, Q., Gu, B. X., Zhu, Y. H., Hu, J. B., Shi, G. Z., & Zheng, S. (2011). Adjuvant radiotherapy for gallbladder cancer: A dosimetric comparison of conformal radiotherapy and intensity-modulated radiotherapy. *World Journal of Gastroenterology*, 17(3), 397-402. *Exclude: Treatment planning*
- Suzuki, M., Nishimura, Y., Nakamatsu, K., Okumura, M., Hashiba, H., Koike, R., . . . Shibata, T. (2006). Analysis of interfractional set-up errors and intrafractional organ motions during IMRT for head and neck tumors to define an appropriate planning target volume (PTV)- and planning organs at risk volume (PRV)-margins. *Radiotherapy & Oncology*, 78(3), 283-290. *Exclude: Treatment planning*
- Svensson, H., Moller, T. R., & SBU Survey, G. (2003). Developments in radiotherapy. *Acta Oncologica*, 42(5-6), 430-442. *Exclude: Treatment planning*
- Swamy, K., Sathiyarayanan, V. K., Basu, S., Maiya, V., Achari, R., Deshpande, S., . . . Koppiker, C. B. (2009). Dose escalation in image-guided, intensity-modulated radiotherapy of carcinoma prostate: Initial experience in india. *Journal of Cancer Research & Therapeutics*, 5(4), 277-283. *Exclude: Study size*
- Sylvestre, A., Mahe, M. A., Lisbona, A., Zefkili, S., Savignoni, A., Bonnette, P., . . . Giraud, P. (2011). Mesothelioma at era of helical tomotherapy: Results of two institutions in combining chemotherapy, surgery and radiotherapy. *Lung Cancer*, 74(3), 486-491. *Exclude: Outcome not specific to IMRT*
- Taddei, P. J., Howell, R. M., Krishnan, S., Scarboro, S. B., Mirkovic, D., & Newhauser, W. D. (2010). Risk of second malignant neoplasm following proton versus intensity-modulated photon radiotherapies for hepatocellular carcinoma. *Physics in Medicine & Biology*, 55(23), 7055-7065. *Exclude: Comparator not of interest (proton beam therapy)*
- Taheri-Kadkhoda, Z., Bjork-Eriksson, T., Nill, S., Wilkens, J. J., Oelfke, U., Johansson, K. A., . . . Munter, M. W. (2008). Intensity-modulated radiotherapy of nasopharyngeal carcinoma: A comparative treatment planning study of photons and protons. *Radiation Oncology*, 3, 4. *Exclude: Study size*
- Taheri-Kadkhoda, Z., Pettersson, N., Bjork-Eriksson, T., & Johansson, K. A. (2008). Superiority of intensity-modulated radiotherapy over three-dimensional conformal radiotherapy combined with brachytherapy in nasopharyngeal carcinoma: A planning study. *British Journal of Radiology*, 81(965), 397-405. *Exclude: Study size*
- Tai, H. C., Hsieh, C. H., Chao, K. S., Liu, S. H., Leu, Y. S., Chang, Y. F., . . . Chen, Y. J. (2009). Comparison of radiotherapy strategies for locally advanced hypopharyngeal cancer after resection and ileocolic flap reconstruction. *Acta Oto-Laryngologica*, 129(3), 311-317. *Exclude: Study size*
- Tai, P., Yu, E., Battista, J., & Van Dyk, J. (2004). Radiation treatment of lung cancer--patterns of practice in canada. *Radiotherapy & Oncology*, 71(2), 167-174. *Exclude: Treatment planning*
- Takahashi, S., Kinoshita, T., Konishi, M., Gotohda, N., Kato, Y., Kinoshita, T., . . . Ikeda, M. (2011). Borderline resectable pancreatic cancer: Rationale for multidisciplinary treatment. *Journal of Hepato-Biliary-Pancreatic Sciences*, 18(4), 567-574. *Exclude: Intervention not of interest (prognostic factors)*
- Tan, W., Wang, X., Qiu, D., Liu, D., Jia, S., Zeng, F., . . . Hu, D. (2011). Dosimetric comparison of intensity-modulated radiotherapy plans, with or without anterior myocardial territory and left ventricle as organs at risk, in early-stage left-sided breast cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1544-1551. *Exclude: Study size*

- Tang, G., Earl, M. A., Luan, S., Wang, C., Mohiuddin, M. M., & Yu, C. X. (2010). Comparing radiation treatments using intensity-modulated beams, multiple arcs, and single arcs. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1554-1562. *Exclude: Study size*
- Tangboonduangjit, P., Wu, I., Butson, M., Rosenfeld, A., & Metcalfe, P. (2003). Intensity modulated radiation therapy: Film verification of planar dose maps. *Australasian Physical & Engineering Sciences in Medicine*, 26(4), 194-199. *Exclude: Treatment planning*
- Tanyi, J. A., He, T., Summers, P. A., Mburu, R. G., Kato, C. M., Rhodes, S. M., . . . Fuss, M. (2010). Assessment of planning target volume margins for intensity-modulated radiotherapy of the prostate gland: Role of daily inter- and intrafraction motion. *International Journal of Radiation Oncology, Biology, Physics*, 78(5), 1579-1585. *Exclude: Study size*
- Tanzler, E., Morris, C. G., Kirwan, J. M., Amdur, R. J., & Mendenhall, W. M. (2011). Outcomes of WHO grade I meningiomas receiving definitive or postoperative radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 79(2), 508-513. *Exclude: Study size*
- Tao, Y., Lefkopoulos, D., Ibrahim, D., Bridier, A., Polizzi Mdel, P., Wibault, P., . . . Bourhis, J. (2008). Comparison of dose contribution to normal pelvic tissues among conventional, conformal and intensity-modulated radiotherapy techniques in prostate cancer. *Acta Oncologica*, 47(3), 442-450. *Exclude: Study size*
- Tarnawski, R., Michalecki, L., Blamek, S., Hawrylewicz, L., Piotrowski, T., Slosarek, K., . . . Bobek-Billewicz, B. (2011). Feasibility of reducing the irradiation dose in regions of active neurogenesis for prophylactic cranial irradiation in patients with small-cell lung cancer. *Neoplasma*, 58(6), 507-515. *Exclude: Study size*
- Teguh, D. N., Levendag, P. C., Noever, I., van Rooij, P., Voet, P., van der Est, H., . . . Schmitz, P. I. (2008). Treatment techniques and site considerations regarding dysphagia-related quality of life in cancer of the oropharynx and nasopharynx. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1119-1127. *Exclude: Treatment planning*
- Teh, A. Y., Walsh, L., Purdie, T. G., Mosseri, A., Xu, W., Levin, W., . . . Cho, B. C. (2012). Concomitant intensity modulated boost during whole breast hypofractionated radiotherapy--a feasibility and toxicity study. *Radiotherapy & Oncology*, 102(1), 89-95. *Exclude: Study size*
- Teh, B. S., Ayala, G., Aguilar, L., Mai, W. Y., Timme, T. L., Vlachaki, M. T., . . . Butler, E. B. (2004). Phase I-II trial evaluating combined intensity-modulated radiotherapy and in situ gene therapy with or without hormonal therapy in treatment of prostate cancer-interim report on PSA response and biopsy data. *International Journal of Radiation Oncology, Biology, Physics*, 58(5), 1520-1529. *Exclude: Date*
- Teh, B. S., Bastasch, M. D., Wheeler, T. M., Mai, W. Y., Frolov, A., Uhl, B. M., . . . Butler, E. B. (2003). IMRT for prostate cancer: Defining target volume based on correlated pathologic volume of disease. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 184-191. *Exclude: Date*
- Teh, B. S., Mai, W. Y., Grant, W. H., 3rd, Chiu, J. K., Lu, H. H., Carpenter, L. S., . . . Butler, E. B. (2002). Intensity modulated radiotherapy (IMRT) decreases treatment-related morbidity and potentially enhances tumor control. *Cancer Investigation*, 20(4), 437-451. *Exclude: Date*
- Teichert, K., Suss, P., Serna, J. I., Monz, M., Kufer, K. H., & Thieke, C. (2011). Comparative analysis of pareto surfaces in multi-criteria IMRT planning. *Physics in Medicine & Biology*, 56(12), 3669-3684. *Exclude: Treatment planning*
- Tenhunen, M., Nyman, H., Strengell, S., & Vaalavirta, L. (2009). Linac-based isocentric electron-photon treatment of radically operated breast carcinoma with enhanced dose uniformity in the field gap area. *Radiotherapy & Oncology*, 93(1), 80-86. *Exclude: Treatment planning*
- Teo, P. M., Ma, B. B., & Chan, A. T. (2004). Radiotherapy for nasopharyngeal carcinoma--transition from two-dimensional to three-dimensional methods. *Radiotherapy & Oncology*, 73(2), 163-172. *Exclude: Date*

- Tepel, J., Niehoff, P., Bokelmann, F., Faendrich, F., Kremer, B., Schmid, A., & Kovacs, G. (2005). Feasibility and early results of interstitial intensity-modulated HDR/PDR brachytherapy (IMBT) with/without complementary external-beam radiotherapy and extended surgery in recurrent pelvic colorectal cancer. *Strahlentherapie Und Onkologie*, 181(11), 696-703. *Exclude: Intervention not of interest (intensity-modulated HDR/PDR brachytherapy)*
- Thariat, J., Bolle, S., Demizu, Y., Marcy, P. Y., Hu, Y., Santini, J., . . . Pommier, P. (2011). New techniques in radiation therapy for head and neck cancer: IMRT, CyberKnife, protons, and carbon ions. improved effectiveness and safety? impact on survival? *Anti-Cancer Drugs*, 22(7), 596-606. *Exclude: Study design (narrative review)*
- Thieke, C., Bortfeld, T., & Kufer, K. H. (2002). Characterization of dose distributions through the max and mean dose concept. *Acta Oncologica*, 41(2), 158-161. *Exclude: Treatment planning*
- Thilmann, C., Schulz-Ertner, D., Zabel, A., Herfarth, K. K., Wannemacher, M., & Debus, J. (2002). Intensity-modulated radiotherapy of sacral chordoma--a case report and a comparison with stereotactic conformal radiotherapy. *Acta Oncologica*, 41(4), 395-399. *Exclude: Sample size*
- Thilmann, C., Sroka-Perez, G., Krempien, R., Hoess, A., Wannemacher, M., & Debus, J. (2004). Inversely planned intensity modulated radiotherapy of the breast including the internal mammary chain: A plan comparison study. *Technology in Cancer Research & Treatment*, 3(1), 69-75. *Exclude: Date*
- Thilmann, C., Zabel, A., Nill, S., Rhein, B., Hoess, A., Haering, P., . . . Debus, J. (2002). Intensity-modulated radiotherapy of the female breast. *Medical Dosimetry*, 27(2), 79-90. *Exclude: Date*
- Thomas, C., Di Maio, S., Ma, R., Vollans, E., Chu, C., Clark, B., . . . Toyota, B. (2007). Hearing preservation following fractionated stereotactic radiotherapy for vestibular schwannomas: Prognostic implications of cochlear dose. *Journal of Neurosurgery*, 107(5), 917-926. *Exclude: Intervention not of interest (SRS)*
- Thomas, S. D., Mackenzie, M., Field, G. C., Syme, A. M., & Fallone, B. G. (2005). Patient specific treatment verifications for helical tomotherapy treatment plans. *Medical Physics*, 32(12), 3793-3800. *Exclude: Study size*
- Thomas, S. J., & Hoole, A. C. (2004). The effect of optimization on surface dose in intensity modulated radiotherapy (IMRT). *Physics in Medicine & Biology*, 49(21), 4919-4928. *Exclude: Treatment planning*
- Thomas, S. J., Vinall, A., Poynter, A., & Routsis, D. (2010). A multicentre timing study of intensity-modulated radiotherapy planning and delivery. *Clinical Oncology (Royal College of Radiologists)*, 22(8), 658-665. *Exclude: Treatment planning*
- Thongphiew, D., Wu, Q. J., Lee, W. R., Chankong, V., Yoo, S., McMahon, R., & Yin, F. F. (2009). Comparison of online IGRT techniques for prostate IMRT treatment: Adaptive vs repositioning correction. *Medical Physics*, 36(5), 1651-1662. *Exclude: Study size*
- Thor, M., Petersen, J. B., Bentzen, L., Hoyer, M., & Muren, L. P. (2011). Deformable image registration for contour propagation from CT to cone-beam CT scans in radiotherapy of prostate cancer. *Acta Oncologica*, 50(6), 918-925. *Exclude: Study size*
- Thorstad, W. L., Chao, K. S., & Haughey, B. (2004). Toxicity and compliance of subcutaneous amifostine in patients undergoing postoperative intensity-modulated radiation therapy for head and neck cancer. *Seminars in Oncology*, 31(6 Suppl 18), 8-12. *Exclude: Date*
- Thorwarth, D., Soukup, M., & Alber, M. (2008). Dose painting with IMPT, helical tomotherapy and IMXT: A dosimetric comparison. *Radiotherapy & Oncology*, 86(1), 30-34. *Exclude: Study size*
- Tillman, G. F., Pawlicki, T., Koong, A. C., & Goodman, K. A. (2008). Preoperative versus postoperative radiotherapy for locally advanced gastroesophageal junction and proximal gastric cancers: A comparison of normal tissue radiation doses. *Diseases of the Esophagus*, 21(5), 437-444. *Exclude: Study size*
- Timke, C., Winnenthal, H. S., Klug, F., Roeder, F. F., Bonertz, A., Reissfelder, C., . . . Huber, P. E. (2011). Randomized controlled phase I/II study to investigate immune stimulatory effects by low dose radiotherapy in primarily operable pancreatic cancer. *BMC Cancer*, 11, 134. *Exclude: Study design (description of clinical trial)*

- Tobler, M., Leavitt, D. D., & Watson, G. (2004). Optimization of the primary collimator settings for fractionated IMRT stereotactic radiotherapy. *Medical Dosimetry*, 29(2), 72-79. *Exclude: Treatment planning*
- Toma-Dasu, I., Uhrdin, J., Antonovic, L., Dasu, A., Nuyts, S., Dirix, P., . . . Brahme, A. (2012). Dose prescription and treatment planning based on FMISO-PET hypoxia. *Acta Oncologica*, 51(2), 222-230. *Exclude: Treatment planning*
- Tomita, N., Kodaira, T., Tachibana, H., Nakamura, T., Nakahara, R., Inokuchi, H., . . . Takada, A. (2009). A comparison of radiation treatment plans using IMRT with helical tomotherapy and 3D conformal radiotherapy for nasal natural killer/T-cell lymphoma. *British Journal of Radiology*, 82(981), 756-763. *Exclude: Study size*
- Topolnjak, R., van der Heide, U. A., & Lagendijk, J. J. (2005). IMRT sequencing for a six-bank multi-leaf system. *Physics in Medicine & Biology*, 50(9), 2015-2031. *Exclude: Treatment planning*
- Townsend, N. C., Huth, B. J., Ding, W., Garber, B., Mooreville, M., Arrigo, S., . . . Brady, L. W. (2011). Acute toxicity after cyberknife-delivered hypofractionated radiotherapy for treatment of prostate cancer. *American Journal of Clinical Oncology*, 34(1), 6-10. *Exclude: Intervention not of interest (SBRT)*
- Tozawa, K., Hashimoto, Y., Yasui, T., Itoh, Y., Nagata, D., Akita, H., . . . Kohri, K. (2008). Evaluation of operative complications related to laparoscopic radical prostatectomy. *International Journal of Urology*, 15(3), 222-225. *Exclude: Intervention not of interest (laparoscopic radical prostatectomy)*
- Treutwein, M., Hipp, M., Kolbl, O., & Bogner, L. (2009). IMRT of prostate cancer: A comparison of fluence optimization with sequential segmentation and direct step-and-shoot optimization. *Strahlentherapie Und Onkologie*, 185(6), 379-383. *Exclude: Study size*
- Trofimov, A., & Bortfeld, T. (2003). Beam delivery sequencing for intensity modulated proton therapy. *Physics in Medicine & Biology*, 48(10), 1321-1331. *Exclude: Treatment planning*
- Trofimov, A., Nguyen, P. L., Coen, J. J., Doppke, K. P., Schneider, R. J., Adams, J. A., . . . Shipley, W. U. (2007). Radiotherapy treatment of early-stage prostate cancer with IMRT and protons: A treatment planning comparison. *International Journal of Radiation Oncology, Biology, Physics*, 69(2), 444-453. *Exclude: Study size*
- Tromm, E., Meyer, A., Fruhauf, J., & Bremer, M. (2010). Partial-volume segmentation for dose optimization in whole-breast radiotherapy: A comparative dosimetric and clinical analysis. *Strahlentherapie Und Onkologie*, 186(1), 40-45. *Exclude: Treatment planning*
- Trouncer, R. J., Rowbottom, C. G., Budgell, G. J., Mackay, R. I., & Magee, B. (2005). Intensity-modulated radiotherapy planning from limited anatomical information: Is sim-CT sufficient for planning women with breast cancer receiving intensity-modulated radiotherapy?. *Clinical Oncology (Royal College of Radiologists)*, 17(5), 343-351. *Exclude: Study size*
- Truong, M. T., Lee, R., Saito, N., Qureshi, M. M., Ozonoff, A., Romesser, P. B., . . . Sakai, O. (2012). Correlating computed tomography perfusion changes in the pharyngeal constrictor muscles during head-and-neck radiotherapy to dysphagia outcome. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), e119-27. *Exclude: Study size*
- Tryggstad, E., Christian, M., Ford, E., Kut, C., Le, Y., Sanguineti, G., . . . Kleinberg, L. (2011). Inter- and intrafraction patient positioning uncertainties for intracranial radiotherapy: A study of four frameless, thermoplastic mask-based immobilization strategies using daily cone-beam CT. *International Journal of Radiation Oncology, Biology, Physics*, 80(1), 281-290. *Exclude: Treatment planning*
- Tsien, C., Eisbruch, A., McShan, D., Kessler, M., Marsh, R., & Fraass, B. (2003). Intensity-modulated radiation therapy (IMRT) for locally advanced paranasal sinus tumors: Incorporating clinical decisions in the optimization process. *International Journal of Radiation Oncology, Biology, Physics*, 55(3), 776-784. *Exclude: Sample size*

- Tsuji, S. Y., Hwang, A., Weinberg, V., Yom, S. S., Quivey, J. M., & Xia, P. (2010). Dosimetric evaluation of automatic segmentation for adaptive IMRT for head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 707-714. *Exclude: Study size*
- Tsutsumi, K., Yasuda, M., & Nishioka, T. (2006). X-ray irradiation altered chemosensitivity of a p53-null non-small cell lung cancer cell line. *Cell Structure & Function*, 31(2), 47-52. *Exclude: Outcome not of interest (p53-null NSCLC genes)*
- Tucker, S. L., Zhang, M., Dong, L., Mohan, R., Kuban, D., & Thames, H. D. (2006). Cluster model analysis of late rectal bleeding after IMRT of prostate cancer: A case-control study. *International Journal of Radiation Oncology, Biology, Physics*, 64(4), 1255-1264. *Exclude: Study size*
- Tudor, G. S. (2007). Comparison of rectal dose histograms under conditions of nonlinear isodoses. *Physics in Medicine & Biology*, 52(1), 275-289. *Exclude: Treatment planning*
- Tunio, M. A., Hashmi, A., & Rafi, M. (2010). Need for a new trial to evaluate postoperative radiotherapy in renal cell carcinoma: A meta-analysis of randomized controlled trials. *Annals of Oncology*, 21(9), 1839-1845. *Exclude: Intervention not of interest (post-operative radiotherapy [general])*
- Turaka, A., Li, T., Nicolaou, N., Lango, M. N., Burtness, B., Horwitz, E. M., . . . Feigenberg, S. J. (2011). Use of a conventional low neck field (LNF) and intensity-modulated radiotherapy (IMRT): No clinical detriment of IMRT to an anterior LNF during the treatment of head-and neck-cancer. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 65-70. *Exclude: Treatment planning*
- Turaka, A., Li, T., Sharma, N. K., Li, L., Nicolaou, N., Mehra, R., . . . Feigenberg, S. J. (2010). Increased recurrences using intensity-modulated radiation therapy in the postoperative setting. *American Journal of Clinical Oncology*, 33(6), 599-603. *Exclude: Study design (no comparator, descriptive narrative of 95 cases)*
- Turner, L. M., Howard, J. A., Dehghanpour, P., Barrett, R. D., Rebueno, N., Palmer, M., . . . Welsh, J. W. (2011). Exploring the feasibility of dose escalation positron emission tomography-positive disease with intensity-modulated radiation therapy and the effects on normal tissue structures for thoracic malignancies. *Medical Dosimetry*, 36(4), 383-388. *Exclude: Treatment planning*
- Ulutin, H. C., Aksu, G., Fayda, M., Kuzhan, O., Tahmaz, L., & Beyzadeoglu, M. (2006). The value of postoperative radiotherapy in renal cell carcinoma: A single-institution experience. *Tumori*, 92(3), 202-206. *Exclude: Outcomes not specific to IMRT*
- Unkelbach, J., & Oelfke, U. (2006). Relating two techniques for handling uncertainties in IMRT optimization. *Physics in Medicine & Biology*, 51(23), N423-7. *Exclude: Treatment planning*
- Vaarkamp, J. (2002). Partial boosting of prostate tumours: Forward planned conformal radiotherapy vs. inverse planned intensity modulated radiotherapy?. *Radiotherapy & Oncology*, 63(2), 232-3. *Exclude: Date*
- Vaarkamp, J., Adams, E. J., Warrington, A. P., & Dearnaley, D. P. (2004). A comparison of forward and inverse planned conformal, multi segment and intensity modulated radiotherapy for the treatment of prostate and pelvic nodes. *Radiotherapy & Oncology*, 73(1), 65-72. *Exclude: Study size*
- Vaarkamp, J., Malde, R., Dixit, S., & Hamilton, C. S. (2009). A comparison of conformal and intensity modulated treatment planning techniques for early prostate cancer. *Journal of Medical Imaging & Radiation Oncology*, 53(3), 310-317. *Exclude: Study size*
- van Asselen, B., Dehnad, H., Raaijmakers, C. P., Roesink, J. M., Legendijk, J. J., & Terhaard, C. H. (2002). The dose to the parotid glands with IMRT for oropharyngeal tumors: The effect of reduction of positioning margins. *Radiotherapy & Oncology*, 64(2), 197-204. *Exclude: Date*
- van Asselen, B., Schwarz, M., van Vliet-Vroegindeweij, C., Lebesque, J. V., Mijnheer, B. J., & Damen, E. M. (2006). Intensity-modulated radiotherapy of breast cancer using direct aperture optimization. *Radiotherapy & Oncology*, 79(2), 162-169. *Exclude: Treatment planning*
- Van Benthuyzen, L., Hales, L., & Podgorsak, M. B. (2011). Volumetric modulated arc therapy vs. IMRT for the treatment of distal esophageal cancer. *Medical Dosimetry*, 36(4), 404-409. *Exclude: Study size*

- van de Bunt, L., van der Heide, U. A., Ketelaars, M., de Kort, G. A., & Jurgenliemk-Schulz, I. M. (2006). Conventional, conformal, and intensity-modulated radiation therapy treatment planning of external beam radiotherapy for cervical cancer: The impact of tumor regression. *International Journal of Radiation Oncology, Biology, Physics*, 64(1), 189-196. *Exclude: Study size*
- van de Water, T. A., Bijl, H. P., Schilstra, C., Pijls-Johannesma, M., & Langendijk, J. A. (2011). The potential benefit of radiotherapy with protons in head and neck cancer with respect to normal tissue sparing: A systematic review of literature. *Oncologist*, 16(3), 366-377. *Exclude: Treatment planning*
- van de Water, T. A., Lomax, A. J., Bijl, H. P., de Jong, M. E., Schilstra, C., Hug, E. B., & Langendijk, J. A. (2011). Potential benefits of scanned intensity-modulated proton therapy versus advanced photon therapy with regard to sparing of the salivary glands in oropharyngeal cancer. *International Journal of Radiation Oncology, Biology, Physics*, 79(4), 1216-1224. *Exclude: Study size*
- van der Geld, Y. G., Senan, S., van Sornsen de Koste, J. R., Verbakel, W. F., Slotman, B. J., & Lagerwaard, F. J. (2007). A four-dimensional CT-based evaluation of techniques for gastric irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 69(3), 903-909. *Exclude: Treatment planning*
- van der Geld, Y. G., van Triest, B., Verbakel, W. F., van Sornsen de Koste, J. R., Senan, S., Slotman, B. J., & Lagerwaard, F. J. (2008). Evaluation of four-dimensional computed tomography-based intensity-modulated and respiratory-gated radiotherapy techniques for pancreatic carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1215-1220. *Exclude: Study size*
- van der Heide, U. A., Kotte, A. N., Dehnad, H., Hofman, P., Lagenijk, J. J., & van Vulpen, M. (2007). Analysis of fiducial marker-based position verification in the external beam radiotherapy of patients with prostate cancer. *Radiotherapy & Oncology*, 82(1), 38-45. *Exclude: Treatment planning*
- Van Esch, A., Depuydt, T., & Huyskens, D. P. (2004). The use of an aSi-based EPID for routine absolute dosimetric pre-treatment verification of dynamic IMRT fields. *Radiotherapy & Oncology*, 71(2), 223-234. *Exclude: Treatment planning*
- van Kranen, S., van Beek, S., Mencarelli, A., Rasch, C., van Herk, M., & Sonke, J. J. (2010). Correction strategies to manage deformations in head-and-neck radiotherapy. *Radiotherapy & Oncology*, 94(2), 199-205. *Exclude: Study size*
- Van Prooijen, M., Kanesalingam, T., Islam, M. K., & Heaton, R. K. (2010). Assessment and management of radiotherapy beam intersections with the treatment couch. *Journal of Applied Clinical Medical Physics*, 11(2), 3171. *Exclude: Treatment planning*
- van Rooijen, D. C., van de Kamer, J. B., Hulshof, M. C., Koning, C. C., & Bel, A. (2010). Improving bladder cancer treatment with radiotherapy using separate intensity modulated radiotherapy plans for boost and elective fields. *Journal of Medical Imaging & Radiation Oncology*, 54(3), 256-263. *Exclude: Treatment planning*
- van Vulpen, M., Field, C., Raaijmakers, C. P., Parliament, M. B., Terhaard, C. H., MacKenzie, M. A., . . . Fallone, B. G. (2005). Comparing step-and-shoot IMRT with dynamic helical tomotherapy IMRT plans for head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 62(5), 1535-1539. *Exclude: Study size*
- van Zijtveld, M., Dirkx, M., Breuers, M., de Boer, H., & Heijmen, B. (2009). Portal dose image prediction for in vivo treatment verification completely based on EPID measurements. *Medical Physics*, 36(3), 946-952. *Exclude: Treatment planning*
- van Zijtveld, M., Dirkx, M., & Heijmen, B. (2007). Correction of conebeam CT values using a planning CT for derivation of the "dose of the day". *Radiotherapy & Oncology*, 85(2), 195-200. *Exclude: Treatment planning*
- Vanderspek, L., Bauman, G., Wang, J. Z., Yartsev, S., Menard, C., Cho, Y. B., . . . Murphy, K. T. (2009). Dosimetric comparison of intensity-modulated radiosurgery and helical tomotherapy for the treatment of multiple intracranial metastases. *Technology in Cancer Research & Treatment*, 8(5), 361-367. *Exclude: Treatment planning*

- Vanderstraeten, B., Duthoy, W., De Gersem, W., De Neve, W., & Thierens, H. (2006). [18F]fluoro-deoxy-glucose positron emission tomography ([18F]FDG-PET) voxel intensity-based intensity-modulated radiation therapy (IMRT) for head and neck cancer. *Radiotherapy & Oncology*, 79(3), 249-258. *Exclude: Treatment planning*
- Vanderstraeten, B., Reynaert, N., Paelinck, L., Madani, I., De Wagter, C., De Gersem, W., . . . Thierens, H. (2006). Accuracy of patient dose calculation for lung IMRT: A comparison of monte carlo, convolution/superposition, and pencil beam computations. *Medical Physics*, 33(9), 3149-3158. *Exclude: Treatment planning*
- Vanetti, E., Clivio, A., Nicolini, G., Fogliata, A., Ghosh-Laskar, S., Agarwal, J. P., . . . Cozzi, L. (2009). Volumetric modulated arc radiotherapy for carcinomas of the oro-pharynx, hypo-pharynx and larynx: A treatment planning comparison with fixed field IMRT. *Radiotherapy & Oncology*, 92(1), 111-117. *Exclude: Treatment planning*
- Vanhavere, F., Huyskens, D., & Struelens, L. (2004). Peripheral neutron and gamma doses in radiotherapy with an 18 MV linear accelerator. *Radiation Protection Dosimetry*, 110(1-4), 607-612. *Exclude: Treatment planning*
- Vargas, C., Fryer, A., Mahajan, C., Indelicato, D., Horne, D., Chellini, A., . . . Keole, S. (2008). Dose-volume comparison of proton therapy and intensity-modulated radiotherapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 70(3), 744-751. *Exclude: Study size*
- Vedam, S., Docef, A., Fix, M., Murphy, M., & Keall, P. (2005). Dosimetric impact of geometric errors due to respiratory motion prediction on dynamic multileaf collimator-based four-dimensional radiation delivery. *Medical Physics*, 32(6), 1607-1620. *Exclude: Treatment planning*
- Vevec, M., Waldron, J. N., O'Sullivan, B., Bayley, A., Cummings, B., Kim, J. J., . . . Dawson, L. A. (2010). Cone-beam CT assessment of interfraction and intrafraction setup error of two head-and-neck cancer thermoplastic masks. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 949-955. *Exclude: Treatment planning*
- Verbakel, W. F., Cuijpers, J. P., Hoffmans, D., Bieker, M., Slotman, B. J., & Senan, S. (2009). Volumetric intensity-modulated arc therapy vs. conventional IMRT in head-and-neck cancer: A comparative planning and dosimetric study. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 252-259. *Exclude: Study size*
- Verbakel, W. F., Senan, S., Cuijpers, J. P., Slotman, B. J., & Lagerwaard, F. J. (2009). Rapid delivery of stereotactic radiotherapy for peripheral lung tumors using volumetric intensity-modulated arcs. *Radiotherapy & Oncology*, 93(1), 122-124. *Exclude: Study size*
- Verellen, D., Linthout, N., Soete, G., Van Acker, S., De Roover, P., & Storme, G. (2002). Considerations on treatment efficiency of different conformal radiation therapy techniques for prostate cancer. *Radiotherapy & Oncology*, 63(1), 27-36. *Exclude: Date*
- Vergeer, M. R., Doornaert, P. A., Rietveld, D. H., Leemans, C. R., Slotman, B. J., & Langendijk, J. A. (2009). Intensity-modulated radiotherapy reduces radiation-induced morbidity and improves health-related quality of life: Results of a nonrandomized prospective study using a standardized follow-up program. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 1-8. *Exclude: Date*
- Vernon, M. R., Maheshwari, M., Schultz, C. J., Michel, M. A., Wong, S. J., Campbell, B. H., . . . Wang, D. (2008). Clinical outcomes of patients receiving integrated PET/CT-guided radiotherapy for head and neck carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 70(3), 678-684. *Exclude: Date*
- Vestergaard, A., Sondergaard, J., Petersen, J. B., Hoyer, M., & Muren, L. P. (2010). A comparison of three different adaptive strategies in image-guided radiotherapy of bladder cancer. *Acta Oncologica*, 49(7), 1069-1076. *Exclude: Study size*
- Vetterli, D., Riem, H., Aebbersold, D. M., Greiner, R. H., Manser, P., Cossmann, P., . . . Mini, R. (2004). Introduction of a novel dose saving acquisition mode for the PortalVision aS500 EPID to facilitate on-line patient setup verification. *Medical Physics*, 31(4), 828-831. *Exclude: Treatment planning*
- Videtic, G. M., Stephans, K., Reddy, C., Gajdos, S., Kolar, M., Clouser, E., & Djemil, T. (2010). Intensity-modulated radiotherapy-based stereotactic body radiotherapy for medically inoperable early-stage lung cancer:

- Excellent local control. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 344-349. *Exclude: Intervention not of interest (SBRT)*
- Vieillot, S., Azria, D., Lemanski, C., Moscardo, C. L., Gourgou, S., Dubois, J. B., . . . Fenoglietto, P. (2010). Plan comparison of volumetric-modulated arc therapy (RapidArc) and conventional intensity-modulated radiation therapy (IMRT) in anal canal cancer. *Radiation Oncology*, 5, 92. *Exclude: Study size*
- Vieira, S. C., Dirkx, M. L., Pasma, K. L., & Heijmen, B. J. (2002). Fast and accurate leaf verification for dynamic multileaf collimation using an electronic portal imaging device. *Medical Physics*, 29(9), 2034-2040. *Exclude: Treatment planning*
- Vieira, S. C., Dirkx, M. L., Pasma, K. L., & Heijmen, B. J. (2003). Dosimetric verification of x-ray fields with steep dose gradients using an electronic portal imaging device. *Physics in Medicine & Biology*, 48(2), 157-166. *Exclude: Treatment planning*
- Vieira, S. C., Kaatee, R. S., Dirkx, M. L., & Heijmen, B. J. (2003). Two-dimensional measurement of photon beam attenuation by the treatment couch and immobilization devices using an electronic portal imaging device. *Medical Physics*, 30(11), 2981-2987. *Exclude: Treatment planning*
- Villeirs, G. M., De Meerleer, G. O., Verstraete, K. L., & De Neve, W. J. (2004). Magnetic resonance assessment of prostate localization variability in intensity-modulated radiotherapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 60(5), 1611-1621. *Exclude: Study size*
- Villeirs, G. M., Van Vaerenbergh, K., Vakaet, L., Bral, S., Claus, F., De Neve, W. J., . . . De Meerleer, G. O. (2005). Interobserver delineation variation using CT versus combined CT + MRI in intensity-modulated radiotherapy for prostate cancer. *Strahlentherapie Und Onkologie*, 181(7), 424-430. *Exclude: Study size*
- Vinall, A. J., Williams, A. J., Currie, V. E., Van Esch, A., & Huyskens, D. (2010). Practical guidelines for routine intensity-modulated radiotherapy verification: Pre-treatment verification with portal dosimetry and treatment verification with in vivo dosimetry. *British Journal of Radiology*, 83(995), 949-957. *Exclude: Treatment planning*
- Vineberg, K. A., Eisbruch, A., Coselmon, M. M., McShan, D. L., Kessler, M. L., & Fraass, B. A. (2002). Is uniform target dose possible in IMRT plans in the head and neck?. *International Journal of Radiation Oncology, Biology, Physics*, 52(5), 1159-1172. *Exclude: Sample size*
- Vinogradskiy, Y. Y., Balter, P., Followill, D. S., Alvarez, P. E., White, R. A., & Starkschall, G. (2009). Comparing the accuracy of four-dimensional photon dose calculations with three-dimensional calculations using moving and deforming phantoms. *Medical Physics*, 36(11), 5000-5006. *Exclude: Treatment planning*
- Vitolo, V., Millender, L. E., Quivey, J. M., Yom, S. S., Schechter, N. R., Jerezek-Fossa, B. A., . . . Xia, P. (2009). Assessment of carotid artery dose in the treatment of nasopharyngeal cancer with IMRT versus conventional radiotherapy. *Radiotherapy & Oncology*, 90(2), 213-220. *Exclude: Study size*
- Vlachaki, M. T., Teslow, T. N., Amosson, C., Uy, N. W., & Ahmad, S. (2005). IMRT versus conventional 3DCRT on prostate and normal tissue dosimetry using an endorectal balloon for prostate immobilization. *Medical Dosimetry*, 30(2), 69-75. *Exclude: Study size*
- Vogelius, I. R., Westerly, D. C., Aznar, M. C., Cannon, G. M., Korreman, S. S., Mackie, T. R., . . . Bentzen, S. M. (2011). Estimated radiation pneumonitis risk after photon versus proton therapy alone or combined with chemotherapy for lung cancer. *Acta Oncologica*, 50(6), 772-776. *Exclude: Study size*
- Vora, S. A., Wong, W. W., Schild, S. E., Ezzell, G. A., & Halyard, M. Y. (2007). Analysis of biochemical control and prognostic factors in patients treated with either low-dose three-dimensional conformal radiation therapy or high-dose intensity-modulated radiotherapy for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 68(4), 1053-1058. *Exclude: Date*
- Voroney, J. P., Brock, K. K., Eccles, C., Haider, M., & Dawson, L. A. (2006). Prospective comparison of computed tomography and magnetic resonance imaging for liver cancer delineation using deformable image



- registration. *International Journal of Radiation Oncology, Biology, Physics*, 66(3), 780-791. Exclude: Intervention not of interest (CT & MRT scans)
- Vorwerk, H., Wagner, D., Christiansen, H., Hess, C. F., & Hermann, R. M. (2008). An easy irradiation technique (partial half-beam) to reduce renal dose in radiotherapy of cervical cancer including paraaortic lymph nodes. *Strahlentherapie Und Onkologie*, 184(9), 473-477. Exclude: Study size
- Voynov, G., Kaufman, S., Hong, T., Pinkerton, A., Simon, R., & Dowsett, R. (2002). Treatment of recurrent malignant gliomas with stereotactic intensity modulated radiation therapy. *American Journal of Clinical Oncology*, 25(6), 606-611. Exclude: Sample size
- Waghorn, B. J., Meeks, S. L., & Langen, K. M. (2011). Analyzing the impact of intrafraction motion: Correlation of different dose metrics with changes in target D95%. *Medical Physics*, 38(8), 4505-4511. Exclude: Study size
- Waghorn, B. J., Shah, A. P., Ngwa, W., Meeks, S. L., Moore, J. A., Siebers, J. V., & Langen, K. M. (2010). A computational method for estimating the dosimetric effect of intra-fraction motion on step-and-shoot IMRT and compensator plans. *Physics in Medicine & Biology*, 55(14), 4187-4202. Exclude: Treatment planning
- Wagner, D., Christiansen, H., Wolff, H., & Vorwerk, H. (2009). Radiotherapy of malignant gliomas: Comparison of volumetric single arc technique (RapidArc), dynamic intensity-modulated technique and 3D conformal technique. *Radiotherapy & Oncology*, 93(3), 593-596. Exclude: Study size
- Wagner, D., & Vorwerk, H. (2011). Two years experience with quality assurance protocol for patient related rapid arc treatment plan verification using a two dimensional ionization chamber array. *Radiation Oncology*, 6, 21. Exclude: Treatment planning
- Wahab, S. H., Malyapa, R. S., Mutic, S., Grigsby, P. W., Deasy, J. O., Miller, T. R., . . . Low, D. A. (2004). A treatment planning study comparing HDR and AGIMRT for cervical cancer. *Medical Physics*, 31(4), 734-743. Exclude: Treatment planning
- Waller, E. J. (2003). Neutron production associated with radiotherapy linear accelerators using intensity modulated radiation therapy mode. *Health Physics*, 85(5 Suppl), S75-7. Exclude: Treatment planning
- Wan Leung, S., Lee, T. F., Chien, C. Y., Chao, P. J., Tsai, W. L., & Fang, F. M. (2011). Health-related quality of life in 640 head and neck cancer survivors after radiotherapy using EORTC QLQ-C30 and QLQ-H&N35 questionnaires. *BMC Cancer*, 11, 128. Exclude: Study design (case series, does not report on harms)
- Wang, D., Hill, R. W., & Lam, S. (2004). A new algorithm for determining collimator angles that favor efficiency in MLC based IMRT delivery. *Medical Physics*, 31(5), 1249-1253. Exclude: Treatment planning
- Wang, D., Yang, Y., Zhu, J., Li, B., Chen, J., & Yin, Y. (2011). 3D-conformal RT, fixed-field IMRT and RapidArc, which one is better for esophageal carcinoma treated with elective nodal irradiation. *Technology in Cancer Research & Treatment*, 10(5), 487-494. Exclude: Treatment planning
- Wang, J., Qiao, X. Y., Lu, F. H., Zhou, Z. G., Song, Y. Z., Huo, J. J., & Liu, X. (2010). TGF-beta1 in serum and induced sputum for predicting radiation pneumonitis in patients with non-small cell lung cancer after radiotherapy. *Chinese Journal of Cancer*, 29(3), 325-329. Exclude: Outcome not of interest (transforming growth factor-beta 1(TGF-beta1))
- Wang, L., Hoban, P., Paskalev, K., Yang, J., Li, J., Chen, L., . . . Ma, C. C. (2005). Dosimetric advantage and clinical implication of a micro-multileaf collimator in the treatment of prostate with intensity-modulated radiotherapy. *Medical Dosimetry*, 30(2), 97-103. Exclude: Study size
- Wang, L., Yorke, E., & Chui, C. S. (2002). Monte carlo evaluation of 6 MV intensity modulated radiotherapy plans for head and neck and lung treatments. *Medical Physics*, 29(11), 2705-2717. Exclude: Sample size
- Wang, S., Gong, Y., Xu, Q., Bai, S., Lu, Y., Jiang, Q., & Chen, N. (2011). Impacts of multileaf collimators leaf width on intensity-modulated radiotherapy planning for nasopharyngeal carcinoma: Analysis of two commercial Elekta devices. *Medical Dosimetry*, 36(2), 153-159. Exclude: Study size

- Wang, S. L., Liao, Z., Liu, H., Ajani, J., Swisher, S., Cox, J. D., & Komaki, R. (2006). Intensity-modulated radiation therapy with concurrent chemotherapy for locally advanced cervical and upper thoracic esophageal cancer. *World Journal of Gastroenterology*, *12*(34), 5501-5508. *Exclude: Study size*
- Wang, X., Krishnan, S., Zhang, X., Dong, L., Briere, T., Crane, C. H., . . . Beddar, S. (2008). Proton radiotherapy for liver tumors: Dosimetric advantages over photon plans. *Medical Dosimetry*, *33*(4), 259-267. *Exclude: Study size*
- Wang, X., Lu, J., Xiong, X., Zhu, G., Ying, H., He, S., . . . Hu, C. (2010). Anatomic and dosimetric changes during the treatment course of intensity-modulated radiotherapy for locally advanced nasopharyngeal carcinoma. *Medical Dosimetry*, *35*(2), 151-157. *Exclude: Study size*
- Wang, Z. H., Zhang, S. Z., Zhang, Z. Y., Zhang, C. P., Hu, H. S., Tu, W. Y., . . . Mendenhall, W. M. (2012). Protecting the oral mucosa in patients with oral tongue squamous cell carcinoma treated postoperatively with intensity-modulated radiotherapy: A randomized study. *Laryngoscope*, *122*(2), 291-298. *Exclude: Study size*
- Wang-Chesebro, A., Xia, P., Coleman, J., Akazawa, C., & Roach, M., 3rd. (2006). Intensity-modulated radiotherapy improves lymph node coverage and dose to critical structures compared with three-dimensional conformal radiation therapy in clinically localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, *66*(3), 654-662. *Exclude: Treatment planning*
- Warkentin, B., Steciw, S., Rathee, S., & Fallone, B. G. (2003). Dosimetric IMRT verification with a flat-panel EPID. *Medical Physics*, *30*(12), 3143-3155. *Exclude: Treatment planning*
- Wasbo, E., & Valen, H. (2008). Dosimetric discrepancies caused by differing MLC parameters for dynamic IMRT. *Physics in Medicine & Biology*, *53*(2), 405-415. *Exclude: Treatment planning*
- Webb, S. (2003). Use of a quantitative index of beam modulation to characterize dose conformality: Illustration by a comparison of full beamlet IMRT, few-segment IMRT (fsIMRT) and conformal unmodulated radiotherapy. *Physics in Medicine & Biology*, *48*(14), 2051-2062. *Exclude: Treatment planning*
- Webb, S. (2005). The effect on IMRT conformality of elastic tissue movement and a practical suggestion for movement compensation via the modified dynamic multileaf collimator (dMLC) technique. *Physics in Medicine & Biology*, *50*(6), 1163-1190. *Exclude: Treatment planning*
- Webb, S., Hartmann, G., Echner, G., & Schlegel, W. (2003). Intensity-modulated radiation therapy using a variable-aperture collimator. *Physics in Medicine & Biology*, *48*(9), 1223-1238. *Exclude: Treatment planning*
- Weber, D. C., Bogner, J., Verwey, J., Georg, D., Dieckmann, K., Escude, L., . . . Miralbell, R. (2005). Proton beam radiotherapy versus fractionated stereotactic radiotherapy for uveal melanomas: A comparative study. *International Journal of Radiation Oncology, Biology, Physics*, *63*(2), 373-384. *Exclude: Treatment planning*
- Weber, D. C., Johanson, S., Peguret, N., Cozzi, L., & Olsen, D. R. (2011). Predicted risk of radiation-induced cancers after involved field and involved node radiotherapy with or without intensity modulation for early-stage hodgkin lymphoma in female patients. *International Journal of Radiation Oncology, Biology, Physics*, *81*(2), 490-497. *Exclude: Study size*
- Weber, D. C., Peguret, N., Dipasquale, G., & Cozzi, L. (2009). Involved-node and involved-field volumetric modulated arc vs. fixed beam intensity-modulated radiotherapy for female patients with early-stage supra-diaphragmatic hodgkin lymphoma: A comparative planning study. *International Journal of Radiation Oncology, Biology, Physics*, *75*(5), 1578-1586. *Exclude: Study size*
- Weber, D. C., Poortmans, P. M., Hurkmans, C. W., Aird, E., Gulyban, A., & Fairchild, A. (2011). Quality assurance for prospective EORTC radiation oncology trials: The challenges of advanced technology in a multicenter international setting. *Radiotherapy & Oncology*, *100*(1), 150-156. *Exclude: Study design (narrative review)*
- Weber, D. C., Wang, H., Cozzi, L., Dipasquale, G., Khan, H. G., Ratib, O., . . . Miralbell, R. (2009). RapidArc, intensity modulated photon and proton techniques for recurrent prostate cancer in previously irradiated patients: A treatment planning comparison study. *Radiation Oncology*, *4*, 34. *Exclude: Study size*

- Wei, W. I., & Kwong, D. L. (2011). Recurrent nasopharyngeal carcinoma: Surgical salvage vs. additional chemoradiation. *Current Opinion in Otolaryngology & Head & Neck Surgery*, 19(2), 82-86. *Exclude: Outcomes not of interest (local control)*
- Weidner, A. M., van Lin, E. N., Dinter, D. J., Rozema, T., Schoenberg, S. O., Wenz, F., . . . Lohr, F. (2011). Ferumoxtran-10 MR lymphography for target definition and follow-up in a patient undergoing image-guided, dose-escalated radiotherapy of lymph nodes upon PSA relapse. *Strahlentherapie Und Onkologie*, 187(3), 206-212. *Exclude: Study size*
- Weiss, E., Siebers, J. V., & Keall, P. J. (2007). An analysis of 6-MV versus 18-MV photon energy plans for intensity-modulated radiation therapy (IMRT) of lung cancer. *Radiotherapy & Oncology*, 82(1), 55-62. *Exclude: Study size*
- Weiss, E., Wijesooriya, K., Ramakrishnan, V., & Keall, P. J. (2008). Comparison of intensity-modulated radiotherapy planning based on manual and automatically generated contours using deformable image registration in four-dimensional computed tomography of lung cancer patients. *International Journal of Radiation Oncology, Biology, Physics*, 70(2), 572-581. *Exclude: Study size*
- Weitmann, H. D., Potter, R., Waldhausl, C., Nechvile, E., Kirisits, C., & Knocke, T. H. (2005). Pilot study in the treatment of endometrial carcinoma with 3D image-based high-dose-rate brachytherapy using modified heyman packing: Clinical experience and dose-volume histogram analysis. *International Journal of Radiation Oncology, Biology, Physics*, 62(2), 468-478. *Exclude: Study size*
- Welsh, J., Gomez, D., Palmer, M. B., Riley, B. A., Mayankkumar, A. V., Komaki, R., . . . Cox, J. D. (2011). Intensity-modulated proton therapy further reduces normal tissue exposure during definitive therapy for locally advanced distal esophageal tumors: A dosimetric study. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), 1336-1342. *Exclude: Study size*
- Welsh, J., Palmer, M. B., Ajani, J. A., Liao, Z., Swisher, S. G., Hofstetter, W. L., . . . Komaki, R. (2012). Esophageal cancer dose escalation using a simultaneous integrated boost technique. *International Journal of Radiation Oncology, Biology, Physics*, 82(1), 468-474. *Exclude: Treatment planning*
- Wendling, M., Louwe, R. J., McDermott, L. N., Sonke, J. J., van Herk, M., & Mijnheer, B. J. (2006). Accurate two-dimensional IMRT verification using a back-projection EPID dosimetry method. *Medical Physics*, 33(2), 259-273. *Exclude: Treatment planning*
- Wenyong, T., Lu, L., Jun, Z., Weidong, Y., & Yun, L. (2010). Dosimetric comparison between intensity-modulated with coplanar field and 3D conformal radiotherapy with noncoplanar field for postocular invasion tumor. *Medical Dosimetry*, 35(2), 128-134. *Exclude: Study size*
- Whitelaw, G. L., Blasiak-Wal, I., Cooke, K., Usher, C., Macdougall, N. D., & Plowman, P. N. (2008). A dosimetric comparison between two intensity-modulated radiotherapy techniques: Tomotherapy vs dynamic linear accelerator. *British Journal of Radiology*, 81(964), 333-340. *Exclude: Study size*
- Whitton, A., Warde, P., Sharpe, M., Oliver, T. K., Bak, K., Leszczynski, K., . . . Green, E. (2009). Organisational standards for the delivery of intensity-modulated radiation therapy in ontario. *Clinical Oncology (Royal College of Radiologists)*, 21(3), 192-203. *Exclude: Intervention not of interest (organizational standards forIMRT)*
- Widesott, L., Pierelli, A., Fiorino, C., Lomax, A. J., Amichetti, M., Cozzarini, C., . . . Schwarz, M. (2011). Helical tomotherapy vs. intensity-modulated proton therapy for whole pelvis irradiation in high-risk prostate cancer patients: Dosimetric, normal tissue complication probability, and generalized equivalent uniform dose analysis. *International Journal of Radiation Oncology, Biology, Physics*, 80(5), 1589-1600. *Exclude: Study size*
- Wieland, P., Dobler, B., Mai, S., Hermann, B., Tiefenbacher, U., Steil, V., . . . Lohr, F. (2004). IMRT for postoperative treatment of gastric cancer: Covering large target volumes in the upper abdomen: A comparison of a step-and-shoot and an arc therapy approach. *International Journal of Radiation Oncology, Biology, Physics*, 59(4), 1236-1244. *Exclude: Study size*

- Wiezorek, T., Banz, N., Schwedas, M., Scheithauer, M., Salz, H., Georg, D., & Wendt, T. G. (2005). Dosimetric quality assurance for intensity-modulated radiotherapy feasibility study for a filmless approach. *Strahlentherapie Und Onkologie*, 181(7), 468-474. *Exclude: Treatment planning*
- Wiezorek, T., Brachwitz, T., Georg, D., Blank, E., Fotina, I., Habl, G., . . . Wendt, T. G. (2011). Rotational IMRT techniques compared to fixed gantry IMRT and tomotherapy: Multi-institutional planning study for head-and-neck cases. *Radiation Oncology*, 6, 20. *Exclude: Study size*
- Wiezorek, T., Schwahofer, A., & Schubert, K. (2009). The influence of different IMRT techniques on the peripheral dose: A comparison between sMLM-IMRT and helical tomotherapy. *Strahlentherapie Und Onkologie*, 185(10), 696-702. *Exclude: Treatment planning*
- Wiezorek, T., Voigt, A., Metzger, N., Georg, D., Schwedas, M., Salz, H., & Wendt, T. G. (2008). Experimental determination of peripheral doses for different IMRT techniques delivered by a siemens linear accelerator. *Strahlentherapie Und Onkologie*, 184(2), 73-79. *Exclude: Treatment planning*
- Wiggenraad, R. G., Petoukhova, A. L., Versluis, L., & van Santvoort, J. P. (2009). Stereotactic radiotherapy of intracranial tumors: A comparison of intensity-modulated radiotherapy and dynamic conformal arc. *International Journal of Radiation Oncology, Biology, Physics*, 74(4), 1018-1026. *Exclude: Treatment planning*
- Wilcox, E., Daskalov, G., & Nedialkova, L. (2007). Comparison of the epon expression 1680 flatbed and the vidar VXR-16 dosimetry PRO film scanners for use in IMRT dosimetry using gafchromic and radiographic film. *Medical Physics*, 34(1), 41-48. *Exclude: Treatment planning*
- Wilcox, E. E., Daskalov, G. M., Pavlonnis, G., 3rd, Shumway, R., Kaplan, B., & VanRooy, E. (2008). Dosimetric verification of intensity modulated radiation therapy of 172 patients treated for various disease sites: Comparison of EBT film dosimetry, ion chamber measurements, and independent MU calculations. *Medical Dosimetry*, 33(4), 303-309. *Exclude: Treatment planning*
- Wilder, R. B., Barme, G. A., Gilbert, R. F., Holevas, R. E., Kobashi, L. I., Reed, R. R., . . . Tokita, K. M. (2010). Cross-linked hyaluronan gel reduces the acute rectal toxicity of radiotherapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 824-830. *Exclude: Treatment planning*
- Wilder, R. B., Barme, G. A., Gilbert, R. F., Holevas, R. E., Kobashi, L. I., Reed, R. R., . . . Tokita, K. M. (2011). Cross-linked hyaluronan gel improves the quality of life of prostate cancer patients undergoing radiotherapy. *Brachytherapy*, 10(1), 44-50. *Exclude: Study size*
- Wilder, R. B., Chittenden, L., Mesa, A. V., Bunyapanasarn, J., Agustin, J., Lizarde, J., . . . Tokita, K. M. (2010). A prospective study of intrafraction prostate motion in the prone vs. supine position. *International Journal of Radiation Oncology, Biology, Physics*, 77(1), 165-170. *Exclude: Study size*
- Williams, M. J., Bailey, M., Forstner, D., & Metcalfe, P. E. (2007). Multicentre quality assurance of intensity-modulated radiation therapy plans: A precursor to clinical trials. *Australasian Radiology*, 51(5), 472-479. *Exclude: Treatment planning*
- Williams, M. V., Cooper, T., Mackay, R., Staffurth, J., Routsis, D., & Burnet, N. (2010). The implementation of intensity-modulated radiotherapy in the UK. *Clinical Oncology (Royal College of Radiologists)*, 22(8), 623-628. *Exclude: Study design (editorial)*
- Williams, M. V., Hoole, A. C., Dean, J. C., Russell, S. G., Thomas, S. J., Fairfoul, J., & Burnet, N. G. (2010). IMRT can be faster to deliver than conformal radiotherapy. *Radiotherapy & Oncology*, 95(2), 257-258. *Exclude: Study design (Letter)*
- Williamson, J. F., Dunscombe, P. B., Sharpe, M. B., Thomadsen, B. R., Purdy, J. A., & Deye, J. A. (2008). Quality assurance needs for modern image-based radiotherapy: Recommendations from 2007 interorganizational symposium on "quality assurance of radiation therapy: Challenges of advanced technology". *International Journal of Radiation Oncology, Biology, Physics*, 71(1 Suppl), S2-12. *Exclude: Treatment planning*

- Willner, J., Jost, A., Baier, K., & Flentje, M. (2003). A little to a lot or a lot to a little? an analysis of pneumonitis risk from dose-volume histogram parameters of the lung in patients with lung cancer treated with 3-D conformal radiotherapy. *Strahlentherapie Und Onkologie*, 179(8), 548-556. *Exclude: Treatment planning*
- Winkler, P., Zurl, B., Guss, H., Kindl, P., & Stuecklschweiger, G. (2005). Performance analysis of a film dosimetric quality assurance procedure for IMRT with regard to the employment of quantitative evaluation methods. *Physics in Medicine & Biology*, 50(4), 643-654. *Exclude: Treatment planning*
- Witzens-Harig, M., Hensel, M., Unterhalt, M., & Herfarth, K. (2011). Treatment of limited stage follicular lymphoma with rituximab immunotherapy and involved field radiotherapy in a prospective multicenter phase II trial-MIR trial. *BMC Cancer*, 11, 87. *Exclude: Study design (decription of ongoing clinical trial)*
- Wojcicka, J. B., Lasher, D. E., McAfee, S. S., & Fortier, G. A. (2009). Dosimetric comparison of three different treatment techniques in extensive scalp lesion irradiation. *Radiotherapy & Oncology*, 91(2), 255-260. *Exclude: Study size*
- Wolden, S. L., Chen, W. C., Pfister, D. G., Kraus, D. H., Berry, S. L., & Zelefsky, M. J. (2006). Intensity-modulated radiation therapy (IMRT) for nasopharynx cancer: Update of the memorial sloan-kettering experience. *International Journal of Radiation Oncology, Biology, Physics*, 64(1), 57-62. *Exclude: Date*
- Wolff, D., Stieler, F., Welzel, G., Lorenz, F., Abo-Madyan, Y., Mai, S., . . . Lohr, F. (2009). Volumetric modulated arc therapy (VMAT) vs. serial tomotherapy, step-and-shoot IMRT and 3D-conformal RT for treatment of prostate cancer. *Radiotherapy & Oncology*, 93(2), 226-233. *Exclude: Study size*
- Wolff, H. A., Wagner, D. M., Conradi, L. C., Hennies, S., Ghadimi, M., Hess, C. F., & Christiansen, H. (2012). Irradiation with protons for the individualized treatment of patients with locally advanced rectal cancer: A planning study with clinical implications. *Radiotherapy & Oncology*, 102(1), 30-37. *Exclude: Treatment planning*
- Wong, G. W., Palazzi-Churas, K. L., Jarrard, D. F., Paolone, D. R., Graf, A. K., Hedican, S. P., . . . Ritter, M. A. (2008). Salvage hypofractionated radiotherapy for biochemically recurrent prostate cancer after radical prostatectomy. *International Journal of Radiation Oncology, Biology, Physics*, 70(2), 449-455. *Exclude: Date*
- Wong, J. R., Gao, Z., Uematsu, M., Merrick, S., Machernis, N. P., Chen, T., & Cheng, C. W. (2008). Interfractional prostate shifts: Review of 1870 computed tomography (CT) scans obtained during image-guided radiotherapy using CT-on-rails for the treatment of prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 72(5), 1396-1401. *Exclude: Treatment planning*
- Wong, J. Y., Liu, A., Schultheiss, T., Popplewell, L., Stein, A., Rosenthal, J., . . . Somlo, G. (2006). Targeted total marrow irradiation using three-dimensional image-guided tomographic intensity-modulated radiation therapy: An alternative to standard total body irradiation. *Biology of Blood & Marrow Transplantation*, 12(3), 306-315. *Exclude: Study size*
- Wong, W. W., Schild, S. E., Vora, S. A., Ezzell, G. A., Nguyen, B. D., Ram, P. C., & Roarke, M. C. (2011). Image-guided radiotherapy for prostate cancer: A prospective trial of concomitant boost using indium-111-capromab pendetide (ProstaScint) imaging. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), e423-9. *Exclude: Intervention not of interest ((111)In-capromab pendetide scan)*
- Woo, S. Y., Grant, W., 3rd, McGary, J. E., Teh, B. S., & Butler, E. B. (2003). The evolution of quality assurance for intensity- modulated radiation therapy (IMRT): Sequential tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 56(1), 274-286. *Exclude: Treatment planning*
- Woo, T. C., Pignol, J. P., Rakovitch, E., Vu, T., Hicks, D., O'Brien, P., & Pritchard, K. (2006). Body radiation exposure in breast cancer radiotherapy: Impact of breast IMRT and virtual wedge compensation techniques. *International Journal of Radiation Oncology, Biology, Physics*, 65(1), 52-58. *Exclude: Treatment planning*
- Worthy, D., & Wu, Q. (2010). Dosimetric assessment of rigid setup error by CBCT for HN-IMRT. *Journal of Applied Clinical Medical Physics*, 11(3), 3187. *Exclude: Treatment planning*

- Woudstra, E., Heijmen, B. J., & Storchi, P. R. (2008). A comparison of an algorithm for automated sequential beam orientation selection (cycle) with simulated annealing. *Physics in Medicine & Biology*, 53(8), 2003-2018. *Exclude: Treatment planning*
- Wu, A. J., Gomez, J., Zhung, J. E., Chan, K., Gomez, D. R., Wolden, S. L., . . . Lee, N. Y. (2010). Radiotherapy after surgical resection for head and neck mucosal melanoma. *American Journal of Clinical Oncology*, 33(3), 281-285. *Exclude: Study size*
- Wu, B., Ricchetti, F., Sanguineti, G., Kazhdan, M., Simari, P., Jacques, R., . . . McNutt, T. (2011). Data-driven approach to generating achievable dose-volume histogram objectives in intensity-modulated radiotherapy planning. *International Journal of Radiation Oncology, Biology, Physics*, 79(4), 1241-1247. *Exclude: Study size*
- Wu, Q. (2004). A dose calculation method including scatter for IMRT optimization. *Physics in Medicine & Biology*, 49(19), 4611-4621. *Exclude: Treatment planning*
- Wu, Q., Chi, Y., Chen, P. Y., Krauss, D. J., Yan, D., & Martinez, A. (2009). Adaptive replanning strategies accounting for shrinkage in head and neck IMRT. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 924-932. *Exclude: Study size*
- Wu, Q., Djajaputra, D., Lauterbach, M., Wu, Y., & Mohan, R. (2003). A fast dose calculation method based on table lookup for IMRT optimization. *Physics in Medicine & Biology*, 48(12), N159-66. *Exclude: Treatment planning*
- Wu, Q., Djajaputra, D., Liu, H. H., Dong, L., Mohan, R., & Wu, Y. (2005). Dose sculpting with generalized equivalent uniform dose. *Medical Physics*, 32(5), 1387-1396. *Exclude: Treatment planning*
- Wu, Q., Mohan, R., Morris, M., Lauve, A., & Schmidt-Ullrich, R. (2003). Simultaneous integrated boost intensity-modulated radiotherapy for locally advanced head-and-neck squamous cell carcinomas. I: Dosimetric results. *International Journal of Radiation Oncology, Biology, Physics*, 56(2), 573-585. *Exclude: Sample size*
- Wu, Q. J., Godfrey, D. J., Wang, Z., Zhang, J., Zhou, S., Yoo, S., . . . Yin, F. F. (2007). On-board patient positioning for head-and-neck IMRT: Comparing digital tomosynthesis to kilovoltage radiography and cone-beam computed tomography. *International Journal of Radiation Oncology, Biology, Physics*, 69(2), 598-606. *Exclude: Study size*
- Wu, Q. J., Wang, Z., Kirkpatrick, J. P., Chang, Z., Meyer, J. J., Lu, M., . . . Yin, F. F. (2009). Impact of collimator leaf width and treatment technique on stereotactic radiosurgery and radiotherapy plans for intra- and extracranial lesions. *Radiation Oncology*, 4, 3. *Exclude: Study size*
- Wu, Q. J., Yin, F. F., McMahon, R., Zhu, X., & Das, S. K. (2010). Similarities between static and rotational intensity-modulated plans. *Physics in Medicine & Biology*, 55(1), 33-43. *Exclude: Study size*
- Wu, Q. J., Yoo, S., Kirkpatrick, J. P., Thongphiew, D., & Yin, F. F. (2009). Volumetric arc intensity-modulated therapy for spine body radiotherapy: Comparison with static intensity-modulated treatment. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1596-1604. *Exclude: Study size*
- Wu, V. W., Kwong, D. L., & Sham, J. S. (2004). Target dose conformity in 3-dimensional conformal radiotherapy and intensity modulated radiotherapy. *Radiotherapy & Oncology*, 71(2), 201-206. *Exclude: Treatment planning*
- Wu, W. C., Chan, C. L., Wong, Y. W., & Cuijpers, J. P. (2010). A study on the influence of breathing phases in intensity-modulated radiotherapy of lung tumours using four-dimensional CT. *British Journal of Radiology*, 83(987), 252-256. *Exclude: Study size*
- Wu, W. C., Leung, W. S., Kay, S. S., Cheung, H. C., & Wah, Y. K. (2011). A comparison between electronic portal imaging device and cone beam CT in radiotherapy verification of nasopharyngeal carcinoma. *Medical Dosimetry*, 36(1), 109-112. *Exclude: Treatment planning*
- Wu, W. C., Mui, W. L., & Fung, W. K. (2010). Helical tomotherapy of nasopharyngeal carcinoma-any advantages over conventional intensity-modulated radiotherapy?. *Medical Dosimetry*, 35(2), 122-127. *Exclude: Study size*
- Xia, P., Qi, P., Hwang, A., Kinsey, E., Pouliot, J., & Roach, M., 3rd. (2010). Comparison of three strategies in management of independent movement of the prostate and pelvic lymph nodes. *Medical Physics*, 37(9), 5006-5013. *Exclude: Treatment planning*

- Xiao, J., Zhang, H., Gong, Y., Fu, Y., Tang, B., Wang, S., . . . Li, P. (2010). Feasibility of using intravenous contrast-enhanced computed tomography (CT) scans in lung cancer treatment planning. *Radiotherapy & Oncology*, 96(1), 73-77. *Exclude: Study size*
- Xiao, Y., Werner-Wasik, M., Michalski, D., Houser, C., Bednarz, G., Curran, W., & Galvin, J. (2004). Comparison of three IMRT inverse planning techniques that allow for partial esophagus sparing in patients receiving thoracic radiation therapy for lung cancer. *Medical Dosimetry*, 29(3), 210-216. *Exclude: Treatment planning*
- Xie, P., Yue, J. B., Zhao, H. X., Sun, X. D., Kong, L., Fu, Z., & Yu, J. M. (2010). Prognostic value of 18F-FDG PET-CT metabolic index for nasopharyngeal carcinoma. *Journal of Cancer Research & Clinical Oncology*, 136(6), 883-889. *Exclude: Outcome not of interest (prognostic value of metabolic tumor volume and metabolic index)*
- Xu, N., Rossi, P. J., & Jani, A. B. (2011). Toxicity analysis of dose escalation from 75.6 Gy to 81.0 Gy in prostate cancer. *American Journal of Clinical Oncology*, 34(1), 11-15. *Exclude: Treatment planning*
- Yamada, Y., Lovelock, M., & Bilsky, M. H. (2006). Image-guided intensity-modulated radiation therapy of spine tumors. *Current Neurology & Neuroscience Reports*, 6(3), 207-211. *Exclude: Study design (narrative review)*
- Yamamoto, T., Kabus, S., von Berg, J., Lorenz, C., & Keall, P. J. (2011). Impact of four-dimensional computed tomography pulmonary ventilation imaging-based functional avoidance for lung cancer radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 279-288. *Exclude: Study size*
- Yan, G., Liu, C., Lu, B., Palta, J. R., & Li, J. G. (2008). Comparison of analytic source models for head scatter factor calculation and planar dose calculation for IMRT. *Physics in Medicine & Biology*, 53(8), 2051-2067. *Exclude: Treatment planning*
- Yan, H., Yin, F. F., Guan, H. Q., & Kim, J. H. (2003). AI-guided parameter optimization in inverse treatment planning. *Physics in Medicine & Biology*, 48(21), 3565-3580. *Exclude: Treatment planning*
- Yang, J., Abdel-Wahab, M., & Ribeiro, A. (2009). EUS-guided fiducial placement before targeted radiation therapy for prostate cancer. *Gastrointestinal Endoscopy*, 70(3), 579-583. *Exclude: Study size*
- Yang, J., Li, J., Chen, L., Price, R., McNeeley, S., Qin, L., . . . Ma, C. M. (2005). Dosimetric verification of IMRT treatment planning using monte carlo simulations for prostate cancer. *Physics in Medicine & Biology*, 50(5), 869-878. *Exclude: Treatment planning*
- Yang, R., Xu, S., Jiang, W., Xie, C., & Wang, J. (2009). Integral dose in three-dimensional conformal radiotherapy, intensity-modulated radiotherapy and helical tomotherapy. *Clinical Oncology (Royal College of Radiologists)*, 21(9), 706-712. *Exclude: Study size*
- Yang, Y., Xing, L., Boyer, A. L., Song, Y., & Hu, Y. (2002). A three-source model for the calculation of head scatter factors. *Medical Physics*, 29(9), 2024-2033. *Exclude: Treatment planning*
- Yang, Y., Xing, L., Li, J. G., Palta, J., Chen, Y., Luxton, G., & Boyer, A. (2003). Independent dosimetric calculation with inclusion of head scatter and MLC transmission for IMRT. *Medical Physics*, 30(11), 2937-2947. *Exclude: Treatment planning*
- Yang, Y., Zhang, P., Happersett, L., Xiong, J., Yang, J., Chan, M., . . . Hunt, M. (2011). Choreographing couch and collimator in volumetric modulated arc therapy. *International Journal of Radiation Oncology, Biology, Physics*, 80(4), 1238-1247. *Exclude: Treatment planning*
- Yao, M., Chang, K., Funk, G. F., Lu, H., Tan, H., Wacha, J., . . . Buatti, J. M. (2007). The failure patterns of oral cavity squamous cell carcinoma after intensity-modulated radiotherapy--the university of iowa experience. *International Journal of Radiation Oncology, Biology, Physics*, 67(5), 1332-1341. *Exclude: Date*
- Yao, M., Dornfeld, K. J., Buatti, J. M., Skwarchuk, M., Tan, H., Nguyen, T., . . . Hoffman, H. T. (2005). Intensity-modulated radiation treatment for head-and-neck squamous cell carcinoma--the university of iowa experience. *International Journal of Radiation Oncology, Biology, Physics*, 63(2), 410-421. *Exclude: Date*
- Yao, M., Graham, M. M., Smith, R. B., Dornfeld, K. J., Skwarchuk, M., Hoffman, H. T., . . . Buatti, J. M. (2004). Value of FDG PET in assessment of treatment response and surveillance in head-and-neck cancer patients after

- intensity modulated radiation treatment: A preliminary report. *International Journal of Radiation Oncology, Biology, Physics*, 60(5), 1410-1418. *Exclude: Date*
- Yao, M., Hoffman, H. T., Chang, K., Funk, G. F., Smith, R. B., Tan, H., . . . Buatti, J. M. (2007). Is planned neck dissection necessary for head and neck cancer after intensity-modulated radiotherapy?. *International Journal of Radiation Oncology, Biology, Physics*, 68(3), 707-713. *Exclude: Date*
- Yao, M., Karnell, L. H., Funk, G. F., Lu, H., Dornfeld, K., & Buatti, J. M. (2007). Health-related quality-of-life outcomes following IMRT versus conventional radiotherapy for oropharyngeal squamous cell carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 69(5), 1354-1360. *Exclude: Date*
- Yao, M., Nguyen, T., Buatti, J. M., Dornfeld, K. J., Tan, H., Wacha, J., . . . Hoffman, H. T. (2006). Changing failure patterns in oropharyngeal squamous cell carcinoma treated with intensity modulated radiotherapy and implications for future research. *American Journal of Clinical Oncology*, 29(6), 606-612. *Exclude: Date*
- Yao, M., Smith, R. B., Hoffman, H. T., Funk, G. F., Lu, M., Menda, Y., . . . Buatti, J. M. (2009). Clinical significance of postradiotherapy [18F]-fluorodeoxyglucose positron emission tomography imaging in management of head-and-neck cancer-a long-term outcome report. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 9-14. *Exclude: Intervention not of interest (FDG-PET)*
- Yartsev, S., Chen, J., Yu, E., Kron, T., Rodrigues, G., Coad, T., . . . Dyk, J. V. (2006). Comparative planning evaluation of intensity-modulated radiotherapy techniques for complex lung cancer cases. *Radiotherapy & Oncology*, 78(2), 169-176. *Exclude: Study size*
- Yartsev, S., Kron, T., Cozzi, L., Fogliata, A., & Bauman, G. (2005). Tomotherapy planning of small brain tumours. *Radiotherapy & Oncology*, 74(1), 49-52. *Exclude: Study size*
- Yeboah, C., & Sandison, G. A. (2002). Optimized treatment planning for prostate cancer comparing IMPT, VHEET and 15 MV IMXT. *Physics in Medicine & Biology*, 47(13), 2247-2261. *Exclude: Date*
- Yee, D., Hanson, J., Butts, C., Reiman, A., Joy, A., Smylie, M., . . . Roa, W. (2010). Phase I dose escalation trial of hypofractionated limited-field external beam thoracic radiotherapy for limited-stage small cell carcinoma of the lung. *Radiotherapy & Oncology*, 96(1), 78-83. *Exclude: Study size*
- Yen, T. C., Lin, C. Y., Wang, H. M., Huang, S. F., Liao, C. T., Kang, C. J., . . . Chang, J. T. (2006). 18F-FDG-PET for evaluation of the response to concurrent chemoradiation therapy with intensity-modulated radiation technique for stage T4 nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 65(5), 1307-1314. *Exclude: Treatment planning*
- Yenice, K. M., Lovelock, D. M., Hunt, M. A., Lutz, W. R., Fournier-Bidoz, N., Hua, C. H., . . . Amols, H. I. (2003). CT image-guided intensity-modulated therapy for paraspinal tumors using stereotactic immobilization. *International Journal of Radiation Oncology, Biology, Physics*, 55(3), 583-593. *Exclude: Sample size*
- Yeo, I. J., Beiki-Ardakani, A., Cho, Y. B., Heydarian, M., Zhang, T., & Islam, M. (2004). EDR2 film dosimetry for IMRT verification using low-energy photon filters. *Medical Physics*, 31(7), 1960-1963. *Exclude: Treatment planning*
- Yeung, T. P., Yartsev, S., Rodrigues, G., & Bauman, G. (2011). Evaluation of image-guidance strategies with helical tomotherapy for localised prostate cancer. *Journal of Medical Imaging & Radiation Oncology*, 55(2), 220-228. *Exclude: Treatment planning*
- Yin, F. F., Ryu, S., Ajlouni, M., Yan, H., Jin, J. Y., Lee, S. W., . . . Kim, J. H. (2004). Image-guided procedures for intensity-modulated spinal radiosurgery. technical note. *Journal of Neurosurgery*, 101(Suppl 3), 419-424. *Exclude: Treatment planning*
- Yin, Y., Ma, C., Gao, M., Chen, J., Ma, Y., Liu, T., . . . Yu, J. (2011). Dosimetric comparison of RapidArc with fixed gantry intensity-modulated radiotherapy treatment for multiple liver metastases radiotherapy. *Medical Dosimetry*, 36(4), 448-454. *Exclude: Study size*
- Yom, S. S., Liao, Z., Liu, H. H., Tucker, S. L., Hu, C. S., Wei, X., . . . Komaki, R. (2007). Initial evaluation of treatment-related pneumonitis in advanced-stage non-small-cell lung cancer patients treated with concurrent



- chemotherapy and intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 68(1), 94-102. *Exclude: Included in systematic review (Veldeman 2008; Staffurth 2010)*
- Yoo, S., Wu, Q. J., Lee, W. R., & Yin, F. F. (2010). Radiotherapy treatment plans with RapidArc for prostate cancer involving seminal vesicles and lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 935-942. *Exclude: Study size*
- Yoo, S., & Yin, F. F. (2006). Dosimetric feasibility of cone-beam CT-based treatment planning compared to CT-based treatment planning. *International Journal of Radiation Oncology, Biology, Physics*, 66(5), 1553-1561. *Exclude: Treatment planning*
- Yoon, M., Shin, D. H., Kim, J., Kim, J. W., Kim, D. W., Park, S. Y., . . . Shin, S. H. (2011). Craniospinal irradiation techniques: A dosimetric comparison of proton beams with standard and advanced photon radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 81(3), 637-646. *Exclude: Study size*
- Yoon, S. S., Chen, Y. L., Kirsch, D. G., Maduekwe, U. N., Rosenberg, A. E., Nielsen, G. P., . . . DeLaney, T. F. (2010). Proton-beam, intensity-modulated, and/or intraoperative electron radiation therapy combined with aggressive anterior surgical resection for retroperitoneal sarcomas. *Annals of Surgical Oncology*, 17(6), 1515-1529. *Exclude: Comparator not of interest (proton-beam radiation therapy and intraoperative electron radiation therapy)*
- Yoshimura, K., Kamoto, T., Nakamura, E., Segawa, T., Kamba, T., Takahashi, T., . . . Ogawa, O. (2007). Health-related quality-of-life after external beam radiation therapy for localized prostate cancer: Intensity-modulated radiation therapy versus conformal radiation therapy. *Prostate Cancer & Prostatic Diseases*, 10(3), 288-292. *Exclude: Date*
- Youssef, E., Chuba, P., Salib, N., Yoo, G. H., Penagaricano, J., Ezzat, W., & Aref, A. (2005). Pathological distribution of positive lymph nodes in patients with clinically and radiologically NO oropharyngeal carcinoma: Implications for IMRT treatment planning. *Cancer Journal*, 11(5), 412-416. *Exclude: Date*
- Yovino, S., Poppe, M., Jabbour, S., David, V., Garofalo, M., Pandya, N., . . . Regine, W. F. (2011). Intensity-modulated radiation therapy significantly improves acute gastrointestinal toxicity in pancreatic and ampullary cancers. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 158-162. *Exclude: Study size (harms)*
- Yu, C., Jozsef, G., Apuzzo, M. L., & Petrovich, Z. (2003). Dosimetric comparison of CyberKnife with other radiosurgical modalities for an ellipsoidal target. *Neurosurgery*, 53(5), 1155-1162. *Exclude: Treatment planning*
- Yu, J. B., Shiao, S. L., & Knisely, J. P. (2007). A dosimetric evaluation of conventional helmet field irradiation versus two-field intensity-modulated radiotherapy technique. *International Journal of Radiation Oncology, Biology, Physics*, 68(2), 621-631. *Exclude: Study size*
- Yuen, J., Rodrigues, G., Trenka, K., Coad, T., Yartsev, S., D'Souza, D., . . . Bauman, G. (2008). Comparing two strategies of dynamic intensity modulated radiation therapy (dIMRT) with 3-dimensional conformal radiation therapy (3DCRT) in the hypofractionated treatment of high-risk prostate cancer. *Radiation Oncology*, 3, 1. *Exclude: Treatment planning*
- Zabel, A., Thilmann, C., Zuna, I., Schlegel, W., Wannemacher, M., & Debus, J. (2002). Comparison of forward planned conformal radiation therapy and inverse planned intensity modulated radiation therapy for esthesioneuroblastoma. *British Journal of Radiology*, 75(892), 356-361. *Exclude: Sample size*
- Zach, L., Stall, B., Ning, H., Ondos, J., Arora, B., Uma, S., . . . Camphausen, K. (2009). A dosimetric comparison of four treatment planning methods for high grade glioma. *Radiation Oncology*, 4, 45. *Exclude: Treatment planning*
- Zechmann, C. M., Aftab, K., Didinger, B., Giesel, F. L., Zamecnik, P., Thieke, C., . . . Delorme, S. (2009). Changes of prostate gland volume with and without androgen deprivation after intensity modulated radiotherapy - A

- follow-up study. *Radiotherapy & Oncology*, 90(3), 408-412. *Exclude: Outcome not of interest (tumor volume, prostate)*
- Zechmann, C. M., Simpfordorfer, T., Giesel, F. L., Zamecnik, P., Thieke, C., Hielscher, T., . . . Delorme, S. (2010). Comparison of peripheral zone and central gland volume in patients undergoing intensity-modulated radiotherapy. *Journal of Computer Assisted Tomography*, 34(5), 739-745. *Exclude: Intervention not of interest (androgen deprivation therapy)*
- Zeidan, O. A., Huddleston, A. J., Lee, C., Langen, K. M., Kupelian, P. A., Meeks, S. L., & Manon, R. R. (2010). A comparison of soft-tissue implanted markers and bony anatomy alignments for image-guided treatments of head-and-neck cancers. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 767-774. *Exclude: Intervention not of interest (implanted markers)*
- Zelevsky, M. J., Chan, H., Hunt, M., Yamada, Y., Shippy, A. M., & Amols, H. (2006). Long-term outcome of high dose intensity modulated radiation therapy for patients with clinically localized prostate cancer. *Journal of Urology*, 176(4 Pt 1), 1415-1419. *Exclude: Date*
- Zelevsky, M. J., Eastham, J. A., Cronin, A. M., Fuks, Z., Zhang, Z., Yamada, Y., . . . Scardino, P. T. (2010). Metastasis after radical prostatectomy or external beam radiotherapy for patients with clinically localized prostate cancer: A comparison of clinical cohorts adjusted for case mix. *Journal of Clinical Oncology*, 28(9), 1508-1513. *Exclude: Comparator not of interest (radical prostatectomy)*
- Zelevsky, M. J., Kattan, M. W., Fearn, P., Fearon, B. L., Stasi, J. P., Shippy, A. M., & Scardino, P. T. (2007). Pretreatment nomogram predicting ten-year biochemical outcome of three-dimensional conformal radiotherapy and intensity-modulated radiotherapy for prostate cancer. *Urology*, 70(2), 283-287. *Exclude: Date*
- Zelevsky, M. J., Levin, E. J., Hunt, M., Yamada, Y., Shippy, A. M., Jackson, A., & Amols, H. I. (2008). Incidence of late rectal and urinary toxicities after three-dimensional conformal radiotherapy and intensity-modulated radiotherapy for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1124-1129. *Exclude: Date*
- Zelevsky, M. J., Marion, C., Fuks, Z., & Leibel, S. A. (2003). Improved biochemical disease-free survival of men younger than 60 years with prostate cancer treated with high dose conformal external beam radiotherapy. *Journal of Urology*, 170(5), 1828-1832. *Exclude: Date*
- Zelevsky, M. J., Nedelka, M. A., Arican, Z. L., Yamada, Y., Cohen, G. N., Shippy, A. M., . . . Zaider, M. (2008). Combined brachytherapy with external beam radiotherapy for localized prostate cancer: Reduced morbidity with an intraoperative brachytherapy planning technique and supplemental intensity-modulated radiation therapy. *Brachytherapy*, 7(1), 1-6. *Exclude: Date*
- Zelevsky, M. J., Pei, X., Chou, J. F., Schechter, M., Kollmeier, M., Cox, B., . . . Zhang, Z. (2011). Dose escalation for prostate cancer radiotherapy: Predictors of long-term biochemical tumor control and distant metastases-free survival outcomes. *European Urology*, 60(6), 1133-1139. *Exclude: Treatment planning*
- Zelevsky, M. J., Shi, W., Yamada, Y., Kollmeier, M. A., Cox, B., Park, J., & Seshan, V. E. (2009). Postradiotherapy 2-year prostate-specific antigen nadir as a predictor of long-term prostate cancer mortality. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1350-1356. *Exclude: Outcome not of interest (nadir PSA values)*
- Zelevsky, M. J., Yamada, Y., Fuks, Z., Zhang, Z., Hunt, M., Cahlon, O., . . . Shippy, A. (2008). Long-term results of conformal radiotherapy for prostate cancer: Impact of dose escalation on biochemical tumor control and distant metastases-free survival outcomes. *International Journal of Radiation Oncology, Biology, Physics*, 71(4), 1028-1033. *Exclude: Treatment planning*

- Zelevsky, M. J., Yamada, Y., Kollmeier, M. A., Shippy, A. M., & Nedelka, M. A. (2008). Long-term outcome following three-dimensional conformal/intensity-modulated external-beam radiotherapy for clinical stage T3 prostate cancer. *European Urology*, 53(6), 1172-1179. *Exclude: Date*
- Zhang, F., & Zheng, M. (2011). Dosimetric evaluation of conventional radiotherapy, 3-D conformal radiotherapy and direct machine parameter optimisation intensity-modulated radiotherapy for breast cancer after conservative surgery. *Journal of Medical Imaging & Radiation Oncology*, 55(6), 595-602. *Exclude: Treatment planning*
- Zhang, H. H., Meyer, R. R., Wu, J., Naqvi, S. A., Shi, L., & D'Souza, W. D. (2010). A two-stage sequential linear programming approach to IMRT dose optimization. *Physics in Medicine & Biology*, 55(3), 883-902. *Exclude: Treatment planning*
- Zhang, P., Happersett, L., Hunt, M., Jackson, A., Zelevsky, M., & Mageras, G. (2010). Volumetric modulated arc therapy: Planning and evaluation for prostate cancer cases. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1456-1462. *Exclude: Study size*
- Zhang, P., Osterman, K. S., Liu, T., Li, X., Kessel, J., Wu, L., . . . Kutcher, G. J. (2007). How does performance of ultrasound tissue typing affect design of prostate IMRT dose-painting protocols?. *International Journal of Radiation Oncology, Biology, Physics*, 67(2), 362-368. *Exclude: Treatment planning*
- Zhang, X., Li, Y., Pan, X., Xiaoqiang, L., Mohan, R., Komaki, R., . . . Chang, J. Y. (2010). Intensity-modulated proton therapy reduces the dose to normal tissue compared with intensity-modulated radiation therapy or passive scattering proton therapy and enables individualized radical radiotherapy for extensive stage IIIB non-small-cell lung cancer: A virtual clinical study. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 357-366. *Exclude: Comparator not of interest (intensity-modulated proton therapy, passive scattering proton therapy)*
- Zhang, X., Liu, H., Wang, X., Dong, L., Wu, Q., & Mohan, R. (2004). Speed and convergence properties of gradient algorithms for optimization of IMRT. *Medical Physics*, 31(5), 1141-1152. *Exclude: Treatment planning*
- Zhang, X., Penagaricano, J., Moros, E. G., Corry, P. M., Yan, Y., & Ratanatharathorn, V. (2010). Dosimetric comparison of helical tomotherapy and linac-IMRT treatment plans for head and neck cancer patients. *Medical Dosimetry*, 35(4), 264-268. *Exclude: Treatment planning*
- Zhang, X., Zhao, K. L., Guerrero, T. M., McGuire, S. E., Yaremko, B., Komaki, R., . . . Liao, Z. (2008). Four-dimensional computed tomography-based treatment planning for intensity-modulated radiation therapy and proton therapy for distal esophageal cancer. *International Journal of Radiation Oncology, Biology, Physics*, 72(1), 278-287. *Exclude: Study size*
- Zhao, L., Wan, Q., Zhou, Y., Deng, X., Xie, C., & Wu, S. (2011). The role of replanning in fractionated intensity modulated radiotherapy for nasopharyngeal carcinoma. *Radiotherapy & Oncology*, 98(1), 23-27. *Exclude: Treatment planning*
- Zhou, G. Q., Mao, Y. P., Chen, L., Li, W. F., Liu, L. Z., Sun, Y., . . . Ma, J. (2012). Prognostic value of prevertebral space involvement in nasopharyngeal carcinoma based on intensity-modulated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), 1090-1097. *Exclude: Outcome not of interest (prevertebral space)*
- Zhou, G. Q., Tang, L. L., Mao, Y. P., Chen, L., Li, W. F., Sun, Y., . . . Ma, J. (2012). Baseline serum lactate dehydrogenase levels for patients treated with intensity-modulated radiotherapy for nasopharyngeal carcinoma: A predictor of poor prognosis and subsequent liver metastasis. *International Journal of Radiation Oncology, Biology, Physics*, 82(3), e359-65. : *Outcome not of interest (serum lactate dehydrogenase)*
- Zhou, G. X., Xu, S. P., Dai, X. K., Ju, Z. J., Gong, H. S., Xie, C. B., . . . Yang, J. (2011). Clinical dosimetric study of three radiotherapy techniques for postoperative breast cancer: Helical tomotherapy, IMRT, and 3D-CRT. *Technology in Cancer Research & Treatment*, 10(1), 15-23. *Exclude: Study size*

- Zhu, S., Mizowaki, T., Nagata, Y., Takayama, K., Norihisa, Y., Yano, S., & Hiraoka, M. (2005). Comparison of three radiotherapy treatment planning protocols of definitive external-beam radiation for localized prostate cancer. *International Journal of Clinical Oncology*, 10(6), 398-404. *Exclude: Treatment planning*
- Zhu, S. Y., Mizowaki, T., Norihisa, Y., Takayama, K., Nagata, Y., & Hiraoka, M. (2008). Comparisons of the impact of systematic uncertainties in patient setup and prostate motion on doses to the target among different plans for definitive external-beam radiotherapy for prostate cancer. *International Journal of Clinical Oncology*, 13(1), 54-61. *Exclude: Study size*
- Zhu, X., Ge, Y., Li, T., Thongphiew, D., Yin, F. F., & Wu, Q. J. (2011). A planning quality evaluation tool for prostate adaptive IMRT based on machine learning. *Medical Physics*, 38(2), 719-726. *Exclude: Treatment planning*
- Zhu, X. R., Jursinic, P. A., Grimm, D. F., Lopez, F., Rownd, J. J., & Gillin, M. T. (2002). Evaluation of kodak EDR2 film for dose verification of intensity modulated radiation therapy delivered by a static multileaf collimator. *Medical Physics*, 29(8), 1687-1692. *Exclude: Treatment planning*
- Zhu, X. R., Prado, K., Liu, H. H., Guerrero, T. M., Jeter, M., Liao, Z., . . . Stevens, C. W. (2005). Intensity-modulated radiation therapy for mesothelioma: Impact of multileaf collimator leaf width and pencil beam size on planning quality and delivery efficiency. *International Journal of Radiation Oncology, Biology, Physics*, 62(5), 1525-1534. *Exclude: Study size*
- Zuur, C. L., Simis, Y. J., Lamers, E. A., Hart, A. A., Dreschler, W. A., Balm, A. J., & Rasch, C. R. (2009). Risk factors for hearing loss in patients treated with intensity-modulated radiotherapy for head-and-neck tumors. *International Journal of Radiation Oncology, Biology, Physics*, 74(2), 490-496. *Exclude: Date*
- Zwahlen, D. R., Ruben, J. D., Jones, P., Gagliardi, F., Millar, J. L., & Schneider, U. (2009). Effect of intensity-modulated pelvic radiotherapy on second cancer risk in the postoperative treatment of endometrial and cervical cancer. *International Journal of Radiation Oncology, Biology, Physics*, 74(2), 539-545. *Exclude: Study size*
- Zwicker, F., Roeder, F., Thieke, C., Timke, C., Munter, M. W., Huber, P. E., & Debus, J. (2011). IMRT reirradiation with concurrent cetuximab immunotherapy in recurrent head and neck cancer. *Strahlentherapie Und Onkologie*, 187(1), 32-38. *Exclude: Study size*

### Public Comment

- Ahn, Lee, Kim, Huh, Yeo, Lim, Kim, Shin, Park and Chang, (2000). Fractionated stereotactic radiation therapy for extracranial head and neck tumors. *International Journal of Radiation Oncology, Biology, Physics*, 48, 501-5. *Exclude: Intervention not of interest (FRST)*
- Ajani JA, Winter KA, Gunderson LL, et al. (2008). Fluorouracil, mitomycin, and radiotherapy vs fluorouracil, cisplatin, and radiotherapy for carcinoma of the anal canal: A randomized controlled trial. *JAMA*, 299(16), 1914-21. *Exclude: Comparator not of interest (comparison of two different chemo regimens+ radiation therapy)*
- Alektiar, K.M., Brennan, M.F., & Singer, S. (2011). Local control comparison of adjuvant brachytherapy to intensity-modulated radiotherapy in primary high-grade sarcoma of the extremity. *Included from MEDLINE® results*
- Alvarez-Moret, Judith, et al. (2010). Improving the performance of direct Monte Carlo optimization for large tumor volumes. *Zeitschrift für Medizinische Physik*, 20(3), 197-205. *Exclude: Treatment planning*
- Amelio, D., Lorentini, S., Schwarz, M., & Amichetti, M. (2010). Intensity-modulated radiation therapy in newly diagnosed glioblastoma: A systematic review on clinical and technical issues. *Radiotherapy and Oncology*, 97(3), 361-9. *Included from MEDLINE® results*
- American College of Radiology (ACR) and American Society for Radiation Oncology (ASTRO) have published practice guidelines for IMRT, revised in 2011.

- ([http://www.acr.org/SecondaryMainMenuCategories/quality\\_safety/guidelines/ro/IMRT.pdf](http://www.acr.org/SecondaryMainMenuCategories/quality_safety/guidelines/ro/IMRT.pdf)) Thank you, included from guideline search.
- Andolino, Johnson, Maluccio, Kwo, Tector, Zook, Johnstone and Cardenes. (2011). Stereotactic body radiotherapy for primary hepatocellular carcinoma *International Journal of Radiation Oncology, Biology, Physics*, 81, e447-53. *Exclude: Intervention not of interest (SBRT)*
- Barney, B.M., Olivier, K.R., Macdonald, O.K., Fong de Los Santos, L.E., Miller, R.C., & Haddock, M.G. (2011). Clinical outcomes and dosimetric considerations using stereotactic body radiotherapy for abdominopelvic tumors. *American Journal of Clinical Oncology*, [epub ahead of print]. *Exclude: Intervention not of interest (SBRT)*
- Bazan JG, Hara W, Hsu A, et al. (2011). Intensity-modulated radiation therapy versus conventional therapy for squamous cell carcinoma of the anal canal. *Cancer*, 117(15), 3342-51. *Exclude: Included in SR (De Neve 2012)*
- Bedford, J. L., & Warrington, A. P. (2009). Commissioning of volumetric modulated arc therapy (VMAT). *International Journal of Radiation Oncology, Biology, Physics*, 73(2), 537-545. *Exclude: Treatment planning*
- Beriwal, S., Jain, S.K., Heron, D.E., Kim, H., Gerszten, K., Edwards, R.P., et al. (2006). Clinical outcome with adjuvant treatment of endometrial carcinoma using intensity-modulated radiation therapy. *Gynecol Oncol*, 102(2), 195-9. *Exclude: Intervention not of interest (IMRT + brachytherapy)*
- Bertelsen, A., Hansen, C. R., Johansen, J., & Brink, C. (2010). Single arc volumetric modulated arc therapy of head and neck cancer. *Radiotherapy & Oncology*, 95(2), 142-148. *Exclude: Treatment planning*
- Bhatnagar, A. K., Brandner, E., Sonnik, D., Wu, A., Kalnicki, S., Deutsch, M., & Heron, D. E. (2006). Intensity modulated radiation therapy (IMRT) reduces the dose to the contralateral breast when compared to conventional tangential fields for primary breast irradiation. *Breast Cancer Research & Treatment*, 96(1), 41-46. *Exclude: Treatment planning*
- Bhide, S. A., & Nutting, C. M. (2010). Advances in radiotherapy for head and neck cancer. *Oral Oncology*, 46(6), 439-441. *Exclude: Study design (narrative description of radiotherapies)*
- Bignardi, M., Cozzi, L., Fogliata, A., Lattuada, P., Mancosu, P., Navarra, P., . . . Scorsetti, M. (2009). Critical appraisal of volumetric modulated arc therapy in stereotactic body radiation therapy for metastases to abdominal lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1570-1577. *Exclude: Study size*
- Bortfeld, Thomas, and Steve Webb. (2009). Single-Arc Imrt? *Physics in Medicine and Biology*, 54,(1), N9-20. *Exclude: Treatment planning*
- Bortfeld, Thomas, and Steve Webb. (2009). Reply to 'Comments on 'Single-Arc Imrt?'. *Physics in Medicine and Biology*, 54(8), L35. *Exclude: Treatment planning*
- Bortfeld, Thomas, and Steve Webb. (2009). Reply to 'Letter to the Editor on 'Single-Arc Imrt?'. *Physics in Medicine and Biology*, 54(8), L43. *Exclude: Treatment planning*
- Bossi, A., De Wever, I., Van Limbergen, E., & Vanstraelen, B. (2007). Intensity modulated radiation-therapy for preoperative posterior abdominal wall irradiation of retroseritoneal liposarcomas. *Int J Radiat Oncol Biol Phys*, 67(1), 164-70. *Exclude: Study size*
- Brierley, J.D. (2011). Update on external beam radiation therapy in thyroid cancer. *Journal of Clinical Endocrinology and Metabolism*, 96(8), 2289-95. *Exclude: Study design (narrative review)*
- Bush, K, and et al. (2008). Monte Carlo Simulation of Rapidarc Radiotherapy Delivery. *Physics in Medicine and Biology*, 53(19), N359-70. *Exclude: Treatment planning*
- Cai, J., Yue, J., McLawhorn, R., Yang, W., Wijesooriya, K., Dunlap, N. E., . . . Benedict, S. H. (2011). Dosimetric comparison of 6 MV and 15 MV single arc rapidarc to helical TomoTherapy for the treatment of pancreatic cancer. *Medical Dosimetry*, 36(3), 317-320. *Exclude: Study size*

- Cahlon O, Hunt M, Zelefsky MJ. (2008). Intensity-modulated radiation therapy: Supportive data for prostate cancer. *Seminars in Radiation Oncology*, 18(1), 48-57. *Exclude: Study design (narrative review)*
- Cengiz, M., Ozyigit, G., Yazici, G., Dogan, A., Yidiz, F., Zorlu, F., et al. (2011). Salvage reirradiation with stereotactic body radiotherapy for locally recurrent head-and-neck tumors. *International Journal of Radiation Oncology, Biology, Physics*, 81(1), 104-9. *Exclude: Intervention not of interest (SBRT)*
- Chan, A.T.C., Grégoire, V., Lefebvre, J.L., Licitra, L., Felip, E., & EHNS-ESMO-ESTRO Guidelines Working Group. (2010). Nasopharyngeal cancer: EHNS-ESMO-ESTRO clinical practice guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*, 21(Suppl 5), v187-v189. *Exclude: Not a US Guideline*
- Chang, D.T., Schellenberg, D., Shen, J., Kim, J., Goodman, K.A., Fisher, G.A., et al. (2009). Stereotactic radiotherapy for unresectable adenocarcinoma of the pancreas. *Cancer*, 115(3), 665-72. *Exclude: Intervention not of interest (SBRT)*
- Chang, D.T., Swaminath, A., Kozak, M., Weintraub, J., Koong, A.C., Kim, J., et al. (2011). Stereotactic body radiotherapy for colorectal liver metastases: A pooled analysis. *Cancer*, 117(17), 4060-9. *Exclude: Intervention not of interest (SBRT)*
- Chao, K.S.C., Majhail, N., Huang, C., Simpson, J.R., Perez, C.A., Haughey, B., et al. (2001). Intensity-modulated radiation therapy reduces late salivary toxicity without compromising tumor control in patients with oropharyngeal carcinoma: A comparison with conventional techniques. *Radiotherapy and Oncology*, 61(3), 275-80. *Exclude: Date*
- Chen, A.M., Li, B.Q., Farwell, D.G., Marsano, J., Vijayakumar, S., & Purdy, J.A. (2011). Improved Dosimetric and Clinical Outcomes With Intensity-Modulated Radiotherapy for Head-and-Neck Cancer of Unknown Primary Origin. *International Journal of Radiation Oncology, Biology, Physics*, 79(3), 756-762. *Included from MEDLINE® results*
- Chen, Tsai, Wang, Wu, Hsueh, Yang, Yeh and Lin. (2006). Experience in fractionated stereotactic body radiation therapy boost for newly diagnosed nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 66(6), 1408-14. *Exclude: Intervention not of interest (SBRT)*
- Chen, Y. J., Liu, A., Tsai, P. T., Vora, N. L., Pezner, R. D., Schultheiss, T. E., & Wong, J. Y. (2005). Organ sparing by conformal avoidance intensity-modulated radiation therapy for anal cancer: Dosimetric evaluation of coverage of pelvis and inguinal/femoral nodes. *International Journal of Radiation Oncology, Biology, Physics*, 63(1), 274-281. *Exclude: Study size*
- Chera, B.S., Rodriguez, C., Morris, C.G., Louis, D., Yeung, D., Li, S., et al. (2009). Dosimetric Comparison of Three Different Involved Nodal Irradiation Techniques for Stage II Hodgkin's Lymphoma Patients: Conventional Radiotherapy, Intensity-Modulated Radiotherapy, and Three-Dimensional Proton Radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(4), 1173-1180. *Exclude: Study size*
- Clark, Grant M., et al. (2010). Feasibility of single-isocenter volumetric modulated arc radiosurgery for treatment of multiple brain metastases. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 296-302. *Exclude: Study size*
- Clavel, S., Nguyen, D. H., Fortin, B., Despres, P., Khaouam, N., Donath, D., . . . Nguyen-Tan, P. F. (2012). Simultaneous integrated boost using intensity-modulated radiotherapy compared with conventional radiotherapy in patients treated with concurrent carboplatin and 5-fluorouracil for locally advanced oropharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 82(2), 582-589. *Included from MEDLINE® results*
- Clivio, A., Fogliata, A., Franzetti-Pellanda, A., Nicolini, G., Vanetti, E., Wyttenbach, R., & Cozzi, L. (2009). Volumetric-modulated arc radiotherapy for carcinomas of the anal canal: A treatment planning comparison with fixed field IMRT. *Radiotherapy & Oncology*, 92(1), 118-124. *Exclude: Study size*

- Comet, B., Kramar, A., Faivre-Pierret, M., Dewas, S., Coche-Dequeant, B., Degardin, M., et al. (2012). Salvage stereotactic reirradiation with and without cetuzimab for locally recurrent head-and-neck cancer: A feasibility study. *International Journal of Radiation Oncology, Biology, Physics*, [epub ahead of print]. *Exclude: Intervention not of interest (SBRT)*
- Court, Laurence, et al. (2010). Evaluation of the interplay effect when using rapidarc to treat targets moving in the craniocaudal or right-left direction. *Medical Physics*, 37(1), 4-11. *Exclude: Treatment planning*
- Cozzi, L., Dinshaw, K. A., Shrivastava, S. K., Mahantshetty, U., Engineer, R., Deshpande, D. D., . . . Fogliata, A. (2008). A treatment planning study comparing volumetric arc modulation with RapidArc and fixed field IMRT for cervix uteri radiotherapy. *Radiotherapy & Oncology*, 89(2), 180-191. *Exclude: Study size*
- Crijns, Wouter, et al. (2010). IMRT-based optimization approaches for volumetric modulated single arc radiotherapy planning." *Radiotherapy and Oncology*, 95(2), 149-152. *Exclude: Study size*
- De La Fuente Herman, T., Ahmad And, S., & Vlachaki, M. T. (2010). Intensity modulated radiation therapy versus three dimensional conformal radiation therapy for treatment of high grade glioma: A radiobiological modeling study. *Journal of X-Ray Science & Technology*, 18(4), 393-402. *Exclude: Study size*
- De Meerleer, G., Vandecasteele, K., Ost, P., Delrue, L., Denys, H., Makar, A., . . . De Neve, W. (2011). Whole abdominopelvic radiotherapy using intensity-modulated arc therapy in the palliative treatment of chemotherapy-resistant ovarian cancer with bulky peritoneal disease: A single-institution experience. *International Journal of Radiation Oncology, Biology, Physics*, 79(3), 775-781. *Exclude: Study size*
- Dijkema, T., Terhaard, C. H., Roesink, J. M., Braam, P. M., van Gils, C. H., Moerland, M. A., & Raaijmakers, C. P. (2008). Large cohort dose-volume response analysis of parotid gland function after radiotherapy: Intensity-modulated versus conventional radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1101-1109. *Exclude: Date*
- Doornaert, Patricia, et al. (2010). RapidArc planning and delivery in patients with locally advanced head-and-neck cancer undergoing chemoradiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 79(2) 429-35. *Exclude: Treatment planning*
- Dworzecki, T., Idasiak, A., Sygula, D., Dworzecka, U., & Suwinski, R. (2012). Stereotactic radiotherapy (SBRT) as a sole or salvage therapy in non-small cell lung cancer patients. *Neoplasma*, 59(1), 114-20. *Exclude: Intervention not of interest (SBRT)*
- Eisbruch A, ten Haken RK, Kim HM, et al. (1999). Dose volume and function relationships in parotid glands following conformal and intensity modulated irradiation of head and neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 45(3), 577-87. *Exclude: Treatment planning*
- Fakiris, McGarry, Yiannoutsos, Papiez, Williams, Henderson and Timmerman. (2009). Stereotactic body radiation therapy for early-stage non-small-cell lung carcinoma: Four-year results of a prospective phase II study. *International Journal of Radiation Oncology, Biology, Physics*, 75(3), 677-82. *Exclude: Intervention not of interest (SBRT)*
- Fiorino, C., Alogni, F., et al. (2008). Physics aspects of prostate tomotherapy: Planning optimization and image-guidance issues. *Acta Oncol*, 47(7), 1309-1316. *Exclude: Treatment planning*
- Fogliata, A., Clivio, A., Nicolini, G., Vanetti, E., & Cozzi, L. (2008). Intensity modulation with photons for benign intracranial tumours: A planning comparison of volumetric single arc, helical arc and fixed gantry techniques. *Radiotherapy & Oncology*, 89(3), 254-262. *Exclude: Study size*
- Fogliata, A., et al. (2009). On the performances of intensity modulated protons, rapidarc and helical tomotherapy for selected paediatric cases. *Radiation Oncology*, 4, 2. *Exclude: Study size*
- Fong, Y., Cohen, A.M., Fortner, J.G., Enker, W.E., Turnbull, A.D., Coit, D.G., et al. (1997). Liver resection for colorectal metastases. *Journal of Clinical Oncology*, 15(3), 938-46. *Exclude: Date*

- Foote RL, Molina JR, Kasperbauer JL, et al. (2011). Enhanced survival in locoregionally confined anaplastic thyroid carcinoma: A single-institution experience using aggressive multimodal therapy. *Thyroid*, 21(1), 25-30. *Included from MEDLINE® results*
- Forsythe, K., Blacksborg, S., Stone, N., & Stock, R.G. (2012). Intensity-modulated radiotherapy causes fewer side effects than three-dimensional conformal radiotherapy when used in combination with brachytherapy for the treatment of prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 83(2), 630-5. *Exclude: Intervention not of interest (IMRT + brachytherapy)*
- Fredh, Anna, Stine Korreman, and Per Munck af Rosenschöld. (2010). Automated analysis of images acquired with electronic portal imaging device during delivery of quality assurance plans for inversely optimized arc therapy. *Radiotherapy and Oncology*, 94(2), 195-198. *Exclude: Treatment planning*
- Friedland J, Freeman D, et al.(2009). Stereotactic body radiotherapy: An emerging treatment approach for localized prostate cancer. *Technology in Cancer Research and Treatment*, 8(5), 387-392. *Exclude: Intervention not of interest (SBRT)*
- Freeman D, King C. (2011). Stereotactic body radiotherapy for low-risk prostate cancer: Five year outcomes. *Radiation Oncology*, 6, 3. *Exclude: Intervention not of interest (SBRT)*
- Fuller DB, Naitoh J et al. (2007). Virtual HDR CyberKnife treatment for localized prostatic carcinoma: Dosimetry comparison with HDR brachytherapy and preliminary clinical observation. *International Journal of Radiation Oncology Biology Physics*, 70(5), 1588-97. *Exclude: Study size*
- Gagne, I. M., Ansbacher, W., Zavgorodni, S., Popescu, C., & Beckham, W. A. (2008). A monte carlo evaluation of RapidArc dose calculations for oropharynx radiotherapy. *Physics in Medicine & Biology*, 53(24), 7167-7185. *Exclude: Study size*
- Garg, Wang, Shiu, Allen, Yang, McAleer, et al. (2011). Prospective evaluation of spinal reirradiation by using stereotactic body radiation therapy: The University of Texas MD Anderson Cancer Center experience. *Cancer*, 117(15), 3509-16. *Exclude: Intervention not of interest (SBRT)*
- Gayowski, T.J., Iwatsuki, S., Madariaga, J.R., Selby, R., Todo, S., Irish, W., et al. (1994). Experience in hepatic resection for metastatic colorectal cancer: Analysis of clinical and pathologic risk factors. *Surgery*, 116(4), 703-10. *Exclude: Date*
- Gerszten, Burton, Ozhasoglu and Welch. (2007). Radiosurgery for spinal metastases: Clinical experience in 500 cases from a single institution. *Spine (Phila Pa 1976)*, 32(2), 193-9. *Exclude: Intervention not of interest (SRS)*
- Goenka A, Magsanoc JM, Pei X, Schechter M, Kollmeier M, Cox B, Scardino PT, Eastham JA, Zelefsky MJ. Improved toxicity profile following high-dose postprostatectomy salvage radiation therapy with intensity-modulated radiation therapy. *Eur Urol*. 2011 Dec;60(6):1142-8 *Included from Medline® results*
- Gomez, D., Cahlon, O., Mechalakos, J., Lee, N. (2010). An investigation of intensity-modulated radiation therapy versus conventional two-dimensional and 3D-conformal radiation therapy for early stage larynx cancer. *Radiation Oncology*, 5(74), 1-9. *Exclude: Study size*
- Gonzalez, V. J., and D. K. Gaffney. (2010). Volumetric modulated arc therapy improves dosimetry and reduces treatment time compared to conventional intensity-modulated radiotherapy for locoregional radiotherapy of left-sided breast cancer and internal mammary nodes: Popescu Cc, Olivotto Ia, Beckham Wa, Et Al (British Columbia Cancer Agency-Vancouver Island Centre, Victoria, Canada; et al) *Int J Radiat Oncol Biol Phys* 76:287-295, 2010." *Breast Diseases: A Year Book Quarterly*, 21(2), 178-179. *Exclude: study design (comment)*
- Goodman, K.A. Toner, S., Hunt, M., et al. (2005). Intensity-modulated radiotherapy for lymphoma involving the mediastinum. *International Journal of Radiation Oncology, Biology, and Physiology*, 62(1), 198-206. *Exclude: Study size*



- Graff P, Lapeyre M, Desandes E, Ortholan C, Bensadoun RJ, Alfonsi M, et al. (2007). Impact of intensity-modulated radiotherapy on health-related quality of life for head and neck cancer patients: matched-pair comparison with conventional radiotherapy. *International Journal of Radiation Oncology, Biology, and Physiology*, 67(5), 1309-17. *Exclude: Date*
- Guckenberger, M., Richter, A., Krieger, T., Wilbert, J., Baier, K., & Flentje, M. (2009). Is a single arc sufficient in volumetric-modulated arc therapy (VMAT) for complex-shaped target volumes?. *Radiotherapy & Oncology*, 93(2), 259-265. *Exclude: Treatment planning*
- Harsolia, A., Kestin, L., Grills, I., et al. (2007). Intensity-modulated radiotherapy results in significant decrease in clinical toxicities compared with conventional wedge-based breast radiotherapy. *International Journal of Radiation Oncology, Biology, Physiology*, 68(5), 1375-1380. *Exclude: Included in systematic review (Hayes 2012 [whole breast])*
- HER2 Support.org. (2010). Brain Talk, Volume 6, Number 2. Retrieved April 5, 2012, from <http://her2support.org/community/member-stories/217-brain-talk-volume-6-number-2> *Exclude: Study design (narrative)*
- Hermanto, U., Frijia, E.K., Lii, M.J., et al. (2007). Intensity-modulated radiotherapy (IMRT) and conventional three-dimensional conformal radiotherapy for high-grade gliomas: Does IMRT increase the integral dose to normal brain? *International Journal of Radiation Oncology, Biology, Physics*, 67(4), 1135-1144. *Exclude: Treatment planning*
- Heron, D.E., Ferris, R.L., Karamouzis, M., Andrade, R.S., Deeb, E.L., Burton, S., et al. (2009). Stereotactic body radiotherapy for recurrent squamous cell carcinoma of the head and neck: Results of a phase I dose-escalation trial. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1493-500. *Exclude: Intervention not of interest*
- Hsu, Fred, et al. (2010). Whole brain radiotherapy with hippocampal avoidance and simultaneous integrated boost for 1-3 brain metastases: A feasibility study using volumetric modulated arc therapy. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1480-1485. *Exclude: Study size*
- Hua, C., Shukla, H.I., Merchant, T.E., & Krasin, M.J. (2007). Estimating differences in volumetric flat bone growth in pediatric patients by radiation treatment method. *International Journal of Radiation Oncology, Biology, Physics*, 67(2), 552-558. *Exclude: Study size*
- Hummel, S., Simpson, E.L., Hemingway, P., Stevenson, M.D., & Rees, A. (2010). Intensity-modulated radiotherapy for the treatment of prostate cancer: a systematic review and economic evaluation. *Health Technology Assessment*, 14(47), 1-108. doi: 10.3310/hta14470 *Included from MEDLINE® results*
- Hysing, L.B., Skorpen, T.N., Alber, M., Fjellsbø, L.B., Helle, S.I., & Muren, L.P. (2008). Influence of Organ Motion on Conformal vs. Intensity-Modulated Pelvic Radiotherapy for Prostate Cancer. *International Journal of Radiation Oncology, Biology, Physics*, 71(5), 1496-1503. *Exclude: Treatment planning*
- Ibarra, Rojas, Snyder, Yao, Fabien, Milano, et al. (2012). Multicenter results of stereotactic body radiotherapy (SBRT) for non-resectable primary liver tumors. *Acta Oncologica*, 51(5), 575-83. *Exclude: Intervention not of interest (SBRT)*
- International RadioSurgery Association. (2004). Radiosurgery Practice Guideline Initiative. Stereotactic radiosurgery for patients with pituitary adenomas. Retrieved April 5, 2012, from <http://www.irs.org/Pituitary%20Guideline.pdf> *Exclude: Intervention not of interest*
- International RadioSurgery Association. (2006). Radiosurgery Practice Guideline Initiative. Stereotactic radiosurgery for patients with vestibular schwannomas. Retrieved April 5, 2012, from <http://www.irs.org/AN%20Guideline.pdf> *Exclude: Intervention not of interest*
- International RadioSurgery Association. (2008). Radiosurgery Practice Guideline Initiative. Stereotactic radiosurgery for patients with metastatic brain tumors. Retrieved April 5, 2012, from <http://www.irs.org/Metastatic%20Guideline.pdf> *Exclude: Intervention not of interest*

- International RadioSurgery Association. (2009). Radiosurgery Practice Guideline Initiative. Stereotactic radiosurgery for patients with intracranial arteriovenous malformations (AVM). Retrieved April 5, 2012, from <http://www.irsa.org/AVM%20Guideline.pdf> Exclude: Intervention not of interest
- International RadioSurgery Association. (2009). Radiosurgery Practice Guideline Initiative. Stereotactic radiosurgery for patients with intractable typical neuralgia who have failed medical management. Retrieved April 5, 2012, from <http://www.irsa.org/TN%20Guideline-UpdatedJan2009.pdf> Exclude: Intervention not of interest
- Jabbari, S., Kim, H. M., Feng, M., Lin, A., Tsien, C., Elshaikh, M., . . . Eisbruch, A. (2005). Matched case-control study of quality of life and xerostomia after intensity-modulated radiotherapy or standard radiotherapy for head-and-neck cancer: Initial report. *International Journal of Radiation Oncology, Biology, Physics*, 63(3), 725-731. Exclude: Study size
- Jaganathan A, Tiwari M, Phansekar R, Panta R, Huilgol N. (2011). Intensity-modulated radiation to spare neural stem cells in brain tumors: a computational platform for evaluation of physical and biological dose metrics. *Journal of Cancer Research and Therapeutics*, 7(1), 58-63. Exclude: Study size
- Johansen, S., Cozzi, L., & Olsen, D. R. (2009). A planning comparison of dose patterns in organs at risk and predicted risk for radiation induced malignancy in the contralateral breast following radiation therapy of primary breast using conventional, IMRT and volumetric modulated arc treatment techniques. *Acta Oncologica*, 48(4), 495-503. Exclude: Study size
- Jouyaux, F., et al. "Haute Dose Dans La Prostate Par Radiothérapie Guidée Par L'image : Apport De L'arthérapie Avec Modulation D'intensité Du Faisceau." *Cancer/Radiothérapie* In Press, Corrected Proof. Available online 31 May 2010. Print.
- Kam, M. K., Leung, S. F., Zee, B., Chau, R. M., Suen, J. J., Mo, F., . . . Chan, A. T. (2007). Prospective randomized study of intensity-modulated radiotherapy on salivary gland function in early-stage nasopharyngeal carcinoma patients. *Journal of Clinical Oncology*, 25(31), 4873-4879. Exclude: Date
- Katz A, Santor M et al. (2010). Stereotactic body radiotherapy for organ confined prostate cancer. *BMC Urology*, 10, 1. Exclude: Intervention not of interest (SBRT)
- Kavanagh, Scheffter, Cardenes, Stieber, Raben, Timmerman, et al. (2006). Interim analysis of a prospective phase I/II trial of SBRT for liver metastases. *Acta Oncologica*, 45(7), 848-55. Exclude: Intervention not of interest (SBRT)
- Kavanagh BD, Pann CC, Dawson, LA, et al. (2010). Radiation dose-volume effects in the stomach and small bowel. *International Journal of Radiation Oncology, Biology, Physics*, 76(3 Suppl), S101-7. Exclude: Treatment planning
- Keall, P. J., Sawant, A., Cho, B., et al. (2010). Electromagnetic-guided dynamic multileaf collimator tracking enables motion management for intensity-modulated arc therapy." *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 312-20. Exclude: Treatment planning
- King CR, Brooks, et al. (2009). Stereotactic body radiotherapy for localized prostate cancer: Interim results of a prospective phase II clinical trial. *International Journal of Radiation Oncology Biology Physics*, 73(4), 1043-1048. Exclude: Intervention not of interest (SBRT)
- King CR, Brooks JD et al. (2012). Long-term outcomes for a prospective trail of stereotactic body radiotherapy for low-risk prostate cancer. *International Journal of Radiation Oncology Biology Physics*, 82(2), 877-82. Exclude: Intervention not of interest (SBRT)
- King, C. R., Lehmann, J., Adler, J. R., & Hai, J. (2003). CyberKnife radiotherapy for localized prostate cancer: Rationale and technical feasibility. *Technology in Cancer Research & Treatment*, 2(1), 25-30. Exclude: Date
- Kjaer-Kristoffersen, F., Ohlhues, L., Medin, J., & Korreman, S. (2009). RapidArc volumetric modulated therapy planning for prostate cancer patients. *Acta Oncologica*, 48(2), 227-232. Exclude: Study size

- Koeck, J., Abo-Madyan, Y., Lohr, F., Stieler, F., Kriz, J., Mueller, R.P., et al. (2011). Radiotherapy for early mediastinal hodgkin lymphoma according to the German Hodgkin Study Group (GHSG): The roles of intensity-modulated radiotherapy and involved-node radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 83(1), 268-76. *Exclude: Treatment planning*
- Kondziolka, D., Flickinger, J.C., Bissonette, D.J., Bozik, M., & Lunsford, L.D. (1997). Survival benefit of stereotactic radiosurgery for patients with malignant glial neoplasms. *Neurosurgery*, 41(4), 776-785. *Exclude: Intervention not of interest (SRS)*
- Kondziolka, D., Levy, El., Niranjan, A., Flickinger, J.C., & Lunsford, L.D. (1999). Long-term outcomes after meningioma radiosurgery: Physician and patient perspectives. *J Neurosurg*, 91(1), 44-50. *Exclude: Intervention not of interest (SRS)*
- Konski, A., Speier, W., Hanlon, A., Beck, J.R., & Pollack, A. (2007). Is proton beam therapy cost effective in the treatment of adenocarcinoma of the prostate? *J Clin Oncology*, 25(4), 3603-8. *Included from MEDLINE® results*
- Konski, A., Watkins-Bruner, D., Feigenberg, S., Hanlon, A., Kulkarni, S., Beck, J. R., . . . Pollack, A. (2006). Using decision analysis to determine the cost-effectiveness of intensity-modulated radiation therapy in the treatment of intermediate risk prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 66(2), 408-415. *Exclude: Date*
- Korreman, Stine, Joakim Medin, and Flemming Kjær-Kristoffersen. (2009). Dosimetric verification of Rapidarc treatment delivery. *Acta Oncologica*, 48(2), 185-191. *Exclude: Study size*
- Kuban, D.A., Tucker, S.L., Dong, L., Starkschall, G., Huang, E.H., Cheung, M.R., et al. (2008). Long-term results of the M.D. Anderson randomized dose-escalation trial for prostate cancer. *Int J Radiat Oncol Biol Phys*, 70(1), 67-74. *Exclude: Treatment planning*
- Kuijper, I. T., Dahele, M., Senan, S., & Verbakel, W. F. (2010). Volumetric modulated arc therapy versus conventional intensity modulated radiation therapy for stereotactic spine radiotherapy: A planning study and early clinical data. *Radiotherapy & Oncology*, 94(2), 224-228. *Exclude: Study size*
- Kung, S. W., Wu, V. W., Kam, M. K., Leung, S. F., Yu, B. K., Ngai, D. Y., . . . Chan, A. T. (2011). Dosimetric comparison of intensity-modulated stereotactic radiotherapy with other stereotactic techniques for locally recurrent nasopharyngeal carcinoma. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 71-79. *Exclude: Intervention not of interest (stereotactic radiotherapy)*
- Kunos, C.A., Dobbins, D.C., Kulasekera, R., Latimer, B., & Kinsella, T.J. (2008). Comparison of helical tomotherapy versus conventional radiation to deliver craniospinal radiation. *Technology in Cancer Research and Treatment*, 7(3), 227-33. *Exclude: Study size*
- Kunos, C., von Gruenigen, V., Waggoner, S., Brindle, J., Zhang, Y., Myers, B., et al. (2008). Cyberknife radiosurgery for squamous cell carcinoma of vulva after prior pelvic radiation therapy. *Technology in Cancer Research and Treatment*, 7(5), 375-80. *Exclude: Study size*
- Lagerwaard, Frank J., et al. (2009). Volumetric modulated arc radiotherapy for vestibular schwannomas. *International Journal of Radiation Oncology, Biology, Physics*, 74(2), 610-615. *Exclude: Study size*
- Lagerwaard, Frank J., et al. (2009). Whole-brain radiotherapy with simultaneous integrated boost to multiple brain metastases using volumetric modulated arc therapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 253-259. *Exclude: Study size*
- Lai, S. Z., Li, W. F., Chen, L., Luo, W., Chen, Y. Y., Liu, L. Z., . . . Ma, J. (2011). How does intensity-modulated radiotherapy versus conventional two-dimensional radiotherapy influence the treatment results in nasopharyngeal carcinoma patients?. *International Journal of Radiation Oncology, Biology, Physics*, 80(3), 661-668. *Excluded: Comparator not of interest (2D-CRT)*
- Lanni, T. B., Jr, Grills, I. S., Kestin, L. L., & Robertson, J. M. (2011). Stereotactic radiotherapy reduces treatment cost while improving overall survival and local control over standard fractionated radiation therapy for

- medically inoperable non-small-cell lung cancer. *American Journal of Clinical Oncology*, 34(5), 494-498. Exclude: Intervention not of interest (SBRT)
- Latorzeff, I., et al. (2010). Apports de la radiothérapie avec modulation d'intensité guidée par l'image dans les cancers prostatiques. *Cancer/Radiothérapie*, 14(96-7), 479-87. Exclude: Not in English
- Lee N, Puri DR, Blanco AI, et al. (2007). Intensity-modulated radiation therapy in head and neck cancers: An update. *Head Neck*, 29(4), 387-400. Exclude: Study design (narrative review)
- Letourneau, Daniel, et al. (2009). Novel dosimetric phantom for quality assurance of volumetric modulated arc therapy. *Medical Physics*, 36(5), 1813-1821. Exclude: Treatment planning
- Ling, C. Clifton, et al. (2009). Scylla and charybdis: Longer beam-on time or lesser conformality-- the dilemma of tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 8-9. Exclude: Study design (letter)
- Ling, C. Clifton, et al. (2008). Commissioning and quality assurance of Rapidarc radiotherapy delivery system. *International Journal of Radiation Oncology, Biology*, 72(2), 575-581. Exclude: Treatment planning
- Lips, I., Dehnad, H., Kruger, A. B., van Moorselaar, J., van der Heide, U., Battermann, J., & van Vulpen, M. (2007). Health-related quality of life in patients with locally advanced prostate cancer after 76 Gy intensity-modulated radiotherapy vs. 70 Gy conformal radiotherapy in a prospective and longitudinal study. *International Journal of Radiation Oncology, Biology, Physics*, 69(3), 656-661. Exclude: Date
- Liu, Wu, Rodney D. Wiersma, and Lei Xing. (2010). Optimized hybrid megavoltage-kilovoltage imaging protocol for volumetric prostate arc rtherapy." *International Journal of Radiation Oncology, Biology*, 78(2), 595-604. Exclude: Treatment planning
- Lock, M., Best, L., Wong, E., Bauman, G., D'Souza, D., Venkatesan, V., . . . Rodrigues, G. (2011). A phase II trial of arc-based hypofractionated intensity-modulated radiotherapy in localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(5), 1306-1315. Included from MEDLINE® results
- Ma, Y., Li, M., Yin, Y., Kong, L., Sun, X., Lin, X., & Yu, J. (2010). Hypofractionated stereotactic radiotherapy for brain metastases: A dosimetric and treatment efficiency comparison between volumetric modulated arc therapy and intensity modulated radiotherapy. *Technology in Cancer Research & Treatment*, 9(5), 499-507. Exclude: Study size
- Mahadevan, Miksad, Goldstein, Sullivan, Bullock, Buchbinder, et al. (2011). Induction gemcitabine and stereotactic body radiotherapy for locally advanced nonmetastatic pancreas cancer. *International Journal of Radiation Oncology, Biology, Physics*, 81(4), e615-22. Exclude: Intervention not of interest (SBRT)
- Mancosu, Pietro, et al. (2010). Re-irradiation of metastatic spinal cord compression: A feasibility study by volumetric-modulated arc radiotherapy for in-field recurrence creating a dosimetric hole on the central canal. *Radiotherapy and Oncology*, 94(1), 67- 70. Exclude: Treatment planning
- Mans, Anton, et al. (2010). 3D dosimetric verification of volumetric-modulated arc therapy by portal dosimetry. *Radiotherapy and Oncology*, 94(2), 181-187. Exclude: Treatment planning
- Matuszak, M. M., Yan, D., Grills, I., & Martinez, A. (2010). Clinical applications of volumetric modulated arc therapy. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 608-616. Exclude: Study size
- Mayo, Charles S., et al. "Initial Experience with Volumetric Imrt (Rapidarc) for Intracranial Stereotactic Radiosurgery." *International Journal of Radiation Oncology, Biology, Physics*, 78(5), 1457-66. Exclude: Study size
- McDonald, M. W., Godette, K. D., Butker, E. K., Davis, L. W., & Johnstone, P. A. (2008). Long-term outcomes of IMRT for breast cancer: A single-institution cohort analysis. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 1031-1040. Exclude: Included in systematic review (Hayes 2012 [whole breast])

- McGrath, S. D., Matuszak, M. M., Yan, D., Kestin, L. L., Martinez, A. A., & Grills, I. S. (2010). Volumetric modulated arc therapy for delivery of hypofractionated stereotactic lung radiotherapy: A dosimetric and treatment efficiency analysis. *Radiotherapy & Oncology*, 95(2), 153-157. *Exclude: Treatment planning*
- Meier R, Beckman A et al. (2010). Stereotactic radiotherapy for organ-confined prostate cancer: Early toxicity and quality of life outcomes from a multi-institutional trial. *International Journal of Radiation Oncology, Biology, Physics*, 78(3), S57. *Exclude: Study design (conference abstract)*
- Mehta, Minesh, Peter Hoban, and T. Rock Mackie. (2009). Commissioning and quality assurance of Rapidarc radiotherapy delivery system: In regard to Ling et al. (Int J Radiat Oncol Biol Phys 2008;72;575-581): Absence of data does not constitute proof; the proof is in tasting the pudding. *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 4-6. *Exclude: Study design (comment)*
- Mesienberg, J. Center for Clinical Decisions and Communication Science. (2010). Comparative Effectiveness and safety of radiotherapy treatments for head and neck cancer. Comparative effectiveness review summary guides for clinicians. Rockville, MD: Agency for Healthcare Research and Quality (US). *Exclude: Studies included in systematic review (Samson 2010)*
- Michalski, J. (2011). Preliminary analysis of 3DCRT vs IMRT on the high dose arm of the RTOG 0126 prostate cancer trial: toxicity report [Abstract]. Retrieved August 8, 2012, from <http://www.oncolink.org/conferences/article.cfm?id=2166> *Exclude: Study design (abstract)*
- Milano, MT, Jani, AB et al. (2005). Intensity-modulated radiation therapy (IMRT) in the treatment of anal cancer: Toxicity and clinical outcome. *International Journal of Radiation Oncology, Biology, Physics*, 63(2), 354-361. *Exclude: Study size*
- Minn, A.Y., Hsu, A., La, T., Kunz, P., Fisher, G.A., Ford, J.M., et al. (2010). Comparison of intensity-modulated radiotherapy and 3-dimensional conformal radiotherapy as adjuvant therapy for gastric cancer. *Cancer*, 116(16), 3943-52. *Included from MEDLINE® results*
- Mohan, Radhe. (2009). Dueling technologies: In regard to Ling et al. (Int J Radiat Oncol Biol Phys 2008;72:575-581). *International Journal of Radiation Oncology, Biology, Physics*, 75(1), 6-7. *Exclude: Study design (comment)*
- Mok, H., Crane, C.H., Palmer, M.B., Briere, T.M., Beddar, S., Delclos, M.E., et al. (2011). Intensity modulated radiation therapy (IMRT): Differences in target volumes and improvement in clinically relevant doses to small bowel in rectal carcinoma. *Radiation Oncology*, 8(6), 63. *Exclude: Study size*
- Moulding, Elder, Lis, Lovelock, Zhang, Yamada and Bilsky. (2010). Local disease control after decompressive surgery and adjuvant high-dose single-fraction radiosurgery for spine metastases. *Journal of Neurosurgery*, 13(1), 87-93. *Exclude: Intervention not of interest (SRS)*
- Murthy, V., Mallik, S., Master, Z., Sharma, P. K., Mahantshetty, U., & Shrivastava, S. K. (2011). Does helical tomotherapy improve dose conformity and normal tissue sparing compared to conventional IMRT? A dosimetric comparison in high risk prostate cancer. *Technology in Cancer Research & Treatment*, 10(2), 179-185. *Exclude: Treatment planning*
- Nakagawa, Keiichi, et al. (2009). First clinical cone-beam CT imaging during volumetric modulated arc therapy. *Radiotherapy and Oncology*, 90(3), 422-423. *Exclude: Study design (letter)*
- NCCN Guidelines for Cancer of the Oropharynx, nasopharynx, maxillary sinus and paranasal/ethmoid sinuses (v 2.2011) 2012 version of this guideline included
- NCCN guidelines for Prostate Cancer (v 1.2011) 2012 version of this guideline included
- NCCN Head and Neck Guideline (2011) 2012 version of this guideline included
- Nicolini, Giorgia, and et al. (2010). Pre-clinical evaluation of respiratory-gated delivery of volumetric modulated arc therapy with Rapidarc. *Physics in Medicine and Biology*, 55(12), N347-57. *Exclude: Study size*
- Nicolini, Giorgia, et al. (2009). Simultaneous integrated boost radiotherapy for bilateral breast: A treatment planning and dosimetric comparison for volumetric modulated arc and fixed field intensity modulated therapy." *Radiation Oncology*, 4(1), 27. *Exclude: Study size*

- Nicolini, Giorgia, et al. (2008). The GLAAs algorithm for portal dosimetry and quality assurance of Rapidarc, an intensity modulated rotational therapy. *Radiation Oncology*, 3(1), 24. *Exclude: Treatment planning*
- Njeh, C.F., Saunders, M.W., & Langton, C.M. (2012). Accelerated partial breast irradiation using external beam conformal radiation therapy: A review. *Critical Reviews in Oncology/Hematology*, 81, 1-20. *Exclude: Study design (narrative review)*
- Nordinger, B., Quilichini, M.A., Parc, R., Hannoun, L., Delva, E., & Huguet, C. (1987). Hepatic resection for colorectal liver metastases. Influence on survival of preoperative factors and surgery for recurrences in 80 patients. *Annals of Surgery*, 205(3), 265-63. *Exclude: Intervention not of interest (surgery)*
- Nutting C, A'Hern R, Rogers MS et al.; on behalf of the PARSPORT Trial Management Group. (2009). First results of a Phase III multicenter randomized controlled trial of intensity modulated (IMRT) versus conventional radiotherapy (RT) in head and neck cancer (PARSPORT: ISRCTN48243537; CRUK/03/005). *Journal of Clinical Oncology*, 27(18 Suppl) (Abstract LBA6006). *Exclude: Study design (conference abstract)*
- Nutting CM, Convery DJ, Cosgrove VP, et al. (2001). Improvement in target coverage and reduced spinal cord irradiation using intensity-modulated radiotherapy (IMRT) in patients with carcinoma of the thyroid gland. *Radiotherapy and Oncology*, 60(2), 173-180. *Exclude: Treatment planning*
- Nutting, C.M., Morden, J.P., Harrington, K.J., Urbano, T.G., Bhide, S.A., Clark, C., et al. (2011). Parotid-sparing intensity modulated versus conventional radiotherapy in head and neck cancer (PARSPORT): A phase 3 multicentre randomized controlled trial. *Lancet Oncol*, 12(2), 127-36. *Included from MEDLINE® results*
- Nwokedi, E.C., DiBiase, S.J., Jabbour, S., Herman, J., Amin, P., & Chin, L.S. (2002). Gamma knife stereotactic radiosurgery for patients with glioblastoma multiforme. *Neurosurgery*, 50(1), 41-47. *Exclude: Intervention not of interest (SRS)*
- Ojemann, S.G., Sneed, P.K., Larson, D.A., Gutin, P.H., Berger, M.S., Verhey, L., et al. (2000). Radiosurgery for malignant meningioma: Results in 22 patients. *Journal of Neurosurgery*, 93(Suppl 3), 62-67. *Exclude: Date*
- Oliver, Michael, Will Ansbacher, and Wayne A Beckham. (2009). Comparing planning time, delivery time and plan quality for IMRT, Rapidarc and tomotherapy." *Journal of Applied Clinical Medical Physics [Online]*, 10(4), 117 - 131. *Exclude: Study size*
- Oliver, Michael, et al. (2010). Analysis of Rapidarc optimization strategies using objective function values and dose-volume histograms." *Journal of Applied Clinical Medical Physics [Online]*, 11(1), 10-23. *Exclude: Study size*
- Oliver, Mike, et al. (2010). Clinical significance of multi-leaf collimator positional errors for volumetric modulated arc therapy. *Radiotherapy and Oncology*, 97(3), 554-60. *Exclude: Study size*
- Ong, ChinLoon, et al. (2011). Dosimetric impact of interplay effect on Rapidarc lung stereotactic treatment delivery. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 305-11. *Exclude: Intervention not of interest (stereotactic radiotherapy)*
- Ost, Piet, et al. (2011). Volumetric arc therapy and intensity-modulated radiotherapy for primary prostate radiotherapy with simultaneous integrated boost to intraprostatic lesion with 6 and 18 Mv: A planning comparison study. *International Journal of Radiation Oncology, Biology, Physics*, 79(3), 920-6. *Exclude: Study size*
- Ost, Piet, et al. (2009). Volumetric modulated arc therapy for delivery of prostate radiotherapy: In regard to Palma et al. (Int J Radiat Oncol Biol Phys 2008;70:996- 1001). *International Journal of Radiation Oncology, Biology, Physics*, 73(), 1286-1286. *Exclude: Study design (letter)*
- Otto, Karl. (2009). Letter to the editor on 'single-arc IMRT?'. *Physics in Medicine and Biology*, 54(8), L37. *Exclude: Study design (letter)*
- Palma, David A., et al. (2010). New developments in arc radiation therapy: A review. *Cancer Treatment Reviews*, 36(9), 393-9. *Exclude: Study design (narrative review)*

- Palma, David A., et al. (2010). Radiological and clinical pneumonitis after stereotactic lung radiotherapy: A matched analysis of three-dimensional conformal and volumetric- modulated arc therapy techniques." *International Journal of Radiation Oncology, Biology, Physics*, 80(2), 506-13. Exclude: Intervention not of interest (SBRT)
- Palma, D., Vollans, E., James, K., Nakano, S., Moiseenko, V., Shaffer, R., . . . Otto, K. (2008). Volumetric modulated arc therapy for delivery of prostate radiotherapy: Comparison with intensity-modulated radiotherapy and three-dimensional conformal radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(4), 996-1001. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=medl&AN=18455326>  
Exclude: Treatment planning
- Palma, David, et al. (2009). In reply to Dr. Ost and colleagues. *International Journal of Radiation Oncology, Biology, Physics*, 73(4), 1287. Exclude: Study design (comment)
- Parhar, P. K., Duckworth, T., Shah, P., DeWyngaert, J. K., Narayana, A., Formenti, S. C., & Shah, J. N. (2010). Decreasing temporal lobe dose with five-field intensity-modulated radiotherapy for treatment of pituitary macroadenomas. *International Journal of Radiation Oncology, Biology, Physics*, 78(2), 379-384. Exclude: Study size
- Parker, William, et al. (2010). Standard and nonstandard craniospinal radiotherapy using helical tomotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 926-31. Exclude: Study size
- Peeters ST, Heemsbergen WD, Koper PC, et al. (2006). Dose-response in radiotherapy for localized prostate cancer: Results of the Dutch multicenter randomized phase III trial comparing 68 Gy of radiotherapy with 78 Gy. *Journal of Clinical Oncology*, 24(13), 1990-1996. Exclude: Date
- Pesce, Gianfranco, et al. (2010). Early clinical experience of radiotherapy of prostate cancer with volumetric modulated arc therapy. *Radiation Oncology*, 5(1), 54. Exclude: Treatment planning
- Peulen, H., Karlsson, K., Lindberg, K., Tullgren, O., Baumann, P., Lax, I., et al. (2011). Toxicity after reirradiation of pulmonary tumours with stereotactic body radiotherapy. *Radiotherapy and Oncology*, 101(2), 260-6. Exclude: Intervention not of interest
- Pezner, R.D., Liu, A., Chen, Y.J., Smith, D.D., & Paz, I.B. (2011). Full-dose adjuvant postoperative radiation therapy for retroperitoneal sarcomas. *Am J Clin Oncol*, 34(5), 511-6. Included from MEDLINE® results
- Pignol, J. P., Olivotto, I., Rakovitch, E., Gardner, S., Sixel, K., Beckham, W., . . . Paszat, L. (2008). A multicenter randomized trial of breast intensity-modulated radiation therapy to reduce acute radiation dermatitis. *Journal of Clinical Oncology*, 26(13), 2085-2092. Exclude: Date
- Ploquin, N., & Dunscombe, P. (2009). A cost-outcome analysis of Image-Guided Patient Repositioning in the radiation treatment of cancer of the prostate. *Radiotherapy and Oncology*, 93, 25–31. Exclude: Treatment planning
- Pollack A, Zagars GK, Starkschall G, et al. (2002). Prostate cancer radiation dose response: Results of the M. D. Anderson phase III randomized trial. *International Journal of Radiation Oncology, Biology, Physics*, 53(5), 1097-1105. Exclude: Date
- Popescu, Carmen C., et al. (2010). Volumetric modulated arc therapy improves dosimetry and reduces treatment time compared to conventional intensity-modulated radiotherapy for locoregional radiotherapy of left-sided breast cancer and internal mammary nodes. *International Journal of Radiation Oncology, Biology, Physics*, 76(1), 287-295. Print. Exclude: Study size
- Poppe, M. M., Narra, V., Yue, N. J., Zhou, J., Nelson, C., & Jabbour, S. K. (2011). A comparison of helical intensity-modulated radiotherapy, intensity-modulated radiotherapy, and 3D-conformal radiation therapy for pancreatic cancer. *Medical Dosimetry*, 36(4), 351-357. Exclude: Study size

- Popple, Richard A., et al. (2010). Rapidarc radiation therapy: First year experience at the University of Alabama at Birmingham. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 932-41. Exclude: Treatment planning
- Posner MD, Quivery JM, Akazawa PF, et al. (2000). Dose optimization for the treatment of anaplastic thyroid carcinoma: A comparison of treatment planning techniques. *International Journal of Radiation Oncology, Biology, Physics*, 48(2), 475-83. Exclude: Treatment planning
- Pow, E.H., Kwong, D.L., McMillan, A.S., Wong, M.C., Sham, J.S., Leung, L.H., et al. (2006). Xerostomia and quality of life after intensity-modulated radiotherapy vs. conventional radiotherapy for early-stage nasopharyngeal carcinoma: Initial report on a randomized controlled trial. *International Journal of Radiation Oncology, Biology, Physics*, 66(4), 981-91. Exclude: Date
- PR Newswire, United Business Media. (n.d.). Cyberknife radiosurgery for early-stage breast cancer may offer reduced infection risk and improve cosmetic results. Retrieved April 5, 2012, from <http://www.prnewswire.com/news-releases/cyberknife-radiosurgery-for-early-stage-breast-cancer-106401063.html> Exclude: Study design (news article)
- Pradip, D., & Fielding, A.L. (2009). Radiobiological model comparison of 3D conformal radiotherapy and IMRT plans for the treatment of prostate. *Australasian Physical and Engineering Sciences in Medicine*, 32(2), 51-61. Exclude: Treatment planning
- Price, Perkins, Sandrasegaran, Henderson, Maluccio, Zook, et al. (2011). Evaluation of response after stereotactic body radiotherapy for hepatocellular carcinoma. *Cancer*, [epub ahead of print] Exclude: Intervention not of interest (SBRT)
- Qian, Jianguo, and et al. (2010). Dose reconstruction for volumetric modulated arc therapy (VMAT) using cone-beam CT and dynamic log files. *Physics in Medicine and Biology*, 55(13), 3597. Exclude: Treatment planning
- Qiu, J. J., Chang, Z., Wu, Q. J., Yoo, S., Horton, J., & Yin, F. F. (2010). Impact of volumetric modulated arc therapy technique on treatment with partial breast irradiation. *International Journal of Radiation Oncology, Biology, Physics*, 78(1), 288-296. Exclude: Study size
- Richetti, Antonella, et al. (2010). Neo-adjuvant chemo-radiation of rectal cancer with volumetric modulated arc therapy: Summary of technical and dosimetric features and early clinical experience. *Radiation Oncology*, 5(1), 14. Exclude: Study size (harms)
- Roche, P.H., Regis, J., Dufour, H., Fournier, H.D., Delsanti, C., Pellet, W., et al. (2000). Gamma knife radiosurgery in the management of cavernous sinus meningiomas. *Journal of Neurosurgery*, 93(Suppl 3), 68-73. Exclude: Intervention not of interest (SRS)
- Rosen, C.B., Nagorney, D.M., Taswell, H.F., Helgeson, S.L., Ilstrup, D.M., van Heerden, J.A., et al. (1992). Perioperative blood transfusion and determinants of survival after liver resection for metastatic colorectal carcinoma. *Annals of Surgery*, 216(4), 493-504. Exclude: Date
- Rustoven, K.E., Kavanagh, B.D., Burri, S.H., Chen, C., Cardenes, H., Chidel, MA., et al. (2009). Multi-institutional phase I/II trial of stereotactic body radiation therapy for lung metastases. *Journal of Clinical Oncology*, 27(10), 1579-84. Exclude: Intervention not of interest (SBRT)
- Rustoven, K.E., Kavanagh, B.D., Cardenes, H., Stieber, V.W., Burri, S.H., Feigenberg, S.J., et al. (2009). Multi-institutional phase I/II trial of stereotactic body radiation therapy for liver metastases. *Journal of Clinical Oncology*, 27(10), 1572-8. Exclude: Intervention not of interest (SBRT)
- Rudat, V., Alaradi, A.A., Mohamed, A., Al-Yahya, K., & Altuwaijri, S. (2011). Tangential beam IMRT versus tangential beam 3D-CRT of the chest wall in postmastectomy breast cancer patients: A dosimetric comparison. *Radiation Oncology*, 6(26). doi:10.1186/1748-717X-6-26 Exclude: Included in systematic review (Hayes, Inc 2012 [whole breast])



- Rwigema, J.C., Wegner, R.E., Mintz, A.H., Paravati, A.J., Burton, S.A., Ozhasoglu, C., et al. (2011). Stereotactic radiosurgery to the resection cavity of brain metastases: A retrospective analysis and literature review. *Stereotactic and Functional Neurosurgery*, 89(6), 329-37. *Exclude: Intervention not of interest (SRS)*
- Saarilahti K, Kouri M, Collan J, et al. (2005). Intensity modulated radiotherapy for head and neck cancer: evidence for preserved salivary gland function. *Radiotherapy and Oncology*, 74(3), 251–8. *Exclude: Study size*
- Schefter, Kavanagh, Timmerman, Cardenes, Baron and Gaspar. (2005). A phase I trial of stereotactic body radiation therapy (SBRT) for liver metastases. *International Journal of Radiation Oncology, Biology, Physics*, 62(5), 1371-8. *Exclude: Study size*
- Schellenberg, D., Kim, J., Christman-Skieller, C., Chun, C. L., Columbo, L. A., Ford, J. M., . . . Koong, A. C. (2011). Single-fraction stereotactic body radiation therapy and sequential gemcitabine for the treatment of locally advanced pancreatic cancer. *International Journal of Radiation Oncology, Biology, Physics*, 81(1), 181-188. *Exclude: Intervention not of interest (SBRT)*
- Scorsetti, M., Mancosu, P., Navarria, P., Tozzi, A., Castiglioni, S., Clerici, E., et al. (2011). Stereotactic body radiation therapy (SBRT) for adrenal metastases: A feasibility study of advanced techniques with modulated photons and protons. *Strahlenther Onkol*, 187(4), 238-44. *Exclude: Intervention not of interest (SBRT)*
- Scorsetti, M., Bignardi, M., Clivio, A., Cozzi, L., Fogliata, A., Lattuada, P., . . . Santoro, A. (2010). Volumetric modulation arc radiotherapy compared with static gantry intensity-modulated radiotherapy for malignant pleural mesothelioma tumor: A feasibility study. *International Journal of Radiation Oncology, Biology, Physics*, 77(3), 942-949. *Exclude: Study size*
- Senan, S., and F. Lagerwaard. (2010). Stereotactic radiotherapy for stage I lung cancer: Current results and new developments. *Cancer Radiothérapie*, 14(2), 115-118. *Exclude: Intervention not of interest (SRS)*
- Shaffer, R., Nichol, A. M., Vollans, E., Fong, M., Nakano, S., Moiseenko, V., . . . Otto, K. (2010). A comparison of volumetric modulated arc therapy and conventional intensity-modulated radiotherapy for frontal and temporal high-grade gliomas. *International Journal of Radiation Oncology, Biology, Physics*, 76(4), 1177-1184. *Exclude: Study size*
- Shaffer, R., Morris, W. J., Moiseenko, V., Welsh, M., Crumley, C., Nakano, S., . . . Otto, K. (2009). Volumetric modulated arc therapy and conventional intensity-modulated radiotherapy for simultaneous maximal intraprostatic boost: A planning comparison study. *Clinical Oncology (Royal College of Radiologists)*, 21(5), 401-407. *Exclude: Study size*
- Shaitelman, S. F., Kim, L. H., Yan, D., Martinez, A. A., Vicini, F. A., & Grills, I. S. (2011). Continuous arc rotation of the couch therapy for the delivery of accelerated partial breast irradiation: A treatment planning analysis. *International Journal of Radiation Oncology, Biology, Physics*, 80(3), 771-778. *Exclude: Study size*
- Sharma, D.S., Gupta, T., Jalali, R., et al. (2009). High-precision radiotherapy for craniospinal irradiation: Evaluation of three-dimensional conformal radiotherapy, intensity-modulated radiation therapy and helical Tomotherapy. *British Journal of Radiology*, 82(984), 1000-1009. *Exclude: Study size*
- Sharma, N. K., Li, T., Chen, D. Y., Pollack, A., Horwitz, E. M., & Buyyounouski, M. K. (2011). Intensity-modulated radiotherapy reduces gastrointestinal toxicity in patients treated with androgen deprivation therapy for prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 80(2), 437-444. *Exclude: Included in systematic review (De Neve(2012))*
- Sher, Wee and Punglia. (2011). Cost-effectiveness analysis of stereotactic body radiotherapy and radiofrequency ablation for medically inoperable, early-stage non-small cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics*, 81(5), e767-74. *Exclude: Intervention not of interest (SBRT)*
- Singh, V.P., Kansai, S., Vaishya, S., Julka, P.K., & Mehta, V.S. (2000). Early complications following gamma knife radiosurgery for intracranial meningiomas. *Journal of Neurosurgery*, 93(Suppl 3), 57-61. *Exclude: Intervention not of interest (gamma knife radiosurgery)*

- Singletary, S.E., Walsh, G., Vauthey, J.N., Curley, S., Sawaya, R., Weber, K.L., et al. (2003). A role for curative surgery in the treatment of selected patients with metastatic breast cancer. *Oncologist*, 8(3), 241-51. *Exclude: Intervention not of interest (surgery)*
- Staffurth J; Radiotherapy Development Board. A review of the clinical evidence for intensity-modulated radiotherapy. *Clin Oncol (R Coll Radiol)*. 2010 Oct;22(8):643-57. Epub 2010 Jul 31. *Included from Medline® results*
- Takeda, A., Oku, Y., Sanuki, N., Kunieda, E., Koike, N., Aoki, Y., et al. (2012). Dose volume histogram analysis of focal liver reaction in follow-up multiphase CT following stereotactic body radiotherapy for small hepatocellular carcinoma. *Radiotherapy and Oncology*, [epub ahead of print]. *Exclude: Intervention not of interest (SBRT)*
- Tang, G., Earl, M. A., Luan, S., Wang, C., Mohiuddin, M. M., & Yu, C. X. (2010). Comparing radiation treatments using intensity-modulated beams, multiple arcs, and single arcs. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1554-1562. *Exclude: Study size*
- Teke, Tony, et al. (2010). Monte Carlo based, patient-specific Rapidarc QA using linac log files. *Medical Physics*, 37(1), 116-123. *Exclude: Study size*
- Thariat, J., Trimaud, R., Angellier, G., Caullery, M., Amiel, J., Bondiau, P.Y., et al. (2011). Innovative image-guided CyberKnife stereotactic radiotherapy for bladder cancer. *Br J Radiol*, 834(990), e118-21. *Exclude: Intervention not of interest (SRS)*
- Thilman, C., Sroka-Perez, G., Krempien, R., et al. (2004). Inversely planned intensity modulated radiotherapy of the breast including the internal mammary chain: A plan comparison study. *Technology Cancer Res Treatment*, 3(1), 69-75. *Exclude: Date*
- Timmerman, Paulus, Galvin, Michalski, Straube, Bradley, et al. (2010). Stereotactic body radiation therapy for inoperable early stage lung cancer. *Journal of the American Medical Association*, 303(11), 1070-6. *Exclude: Intervention not of interest (SBRT)*
- Toscas, José I., et al. (2010). Boosting the tumor bed from deep-seated tumors in early-stage breast cancer: A planning study between electron, photon, and proton beams. *Radiotherapy and Oncology*, 96(2), 192-198. *Exclude: Study size*
- Tsai, Chiao-Ling, et al. (2011). Treatment and dosimetric advantages between VMAT, IMRT, and helical tomotherapy in prostate cancer. *Medical Dosimetry*, 36(3), 264-71. *Exclude: Study size.*
- Tsai, HD, Hong, TS, et al. (2006, January 28). Dosimetric comparison of dose-painted IMRT vs conventional radiation therapy for anal cancer. Poster presentation at ASCO-GI symposium, San Francisco, CA. *Exclude: Study design (poster presentation)*
- Unger, Lominska, Deeken, Davidson, Newkirk, Gagnon, et al. (2010). Fractionated stereotactic radiosurgery for reirradiation of head-and-neck cancer. *International Journal of Radiation Oncology, Biology, Physics*, 77(5), 1411-9. *Exclude: Intervention not of interest (SRS)*
- Uno, Isobe, Ueno, Fukuda, Sudo, Shirotori, et al. (2010). Fractionated stereotactic radiotherapy as a boost treatment for tumors in the head and neck region. *Journal of Radiation Research*, 51(4), 449-54. *Exclude: Intervention not of interest (SRT)*
- Urbano TG, Clark CH, Hansen VN, et al. (2007). Intensity modulated radiotherapy (IMRT) in locally advanced thyroid cancer: Acute toxicity results of a phase I study. *Radiotherapy and Oncology*, 85(1), 58-63. *Exclude: Study size*
- Vanetti, E., Clivio, A., Nicolini, G., Fogliata, A., Ghosh-Laskar, S., Agarwal, J. P., . . . Cozzi, L. (2009). Volumetric modulated arc radiotherapy for carcinomas of the oro-pharynx, hypo-pharynx and larynx: A treatment planning comparison with fixed field IMRT. *Radiotherapy & Oncology*, 92(1), 111-117. *Exclude: Treatment planning*

- Vanetti, Eugenio, and et al. (2009). The impact of treatment couch modelling on Rapidarc. *Physics in Medicine and Biology*, 54(9), N157-66. *Exclude: Treatment planning*
- Veldeman, L., Madani, I., Hulstaert, F., De Meerleer, G., Mareel, M., & De Neve, W. (2008). Evidence behind use of intensity-modulated radiotherapy: A systematic review of comparative clinical studies. *Lancet Oncology*, 9(4), 367-375. *Included from Medline® results*
- Verbakel, W. F., Senan, S., Cuijpers, J. P., Slotman, B. J., & Lagerwaard, F. J. (2009). Rapid delivery of stereotactic radiotherapy for peripheral lung tumors using volumetric intensity-modulated arcs. *Radiotherapy & Oncology*, 93(1), 122-124. *Exclude: Study size*
- Verbakel, W F A R, and et al. (2009). Comments on 'Single-Arc Imrt?'. *Physics in Medicine and Biology*, 54(8), L31-4. *Exclude: Study design (comment)*
- Verbakel, W. F., Cuijpers, J. P., Hoffmans, D., Bieker, M., Slotman, B. J., & Senan, S. (2009). Volumetric intensity-modulated arc therapy vs. conventional IMRT in head-and-neck cancer: A comparative planning and dosimetric study. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 252-259. *Print. Exclude: Study size*
- Vergeer, M. R., Doornaert, P. A., Rietveld, D. H., Leemans, C. R., Slotman, B. J., & Langendijk, J. A. (2009). Intensity-modulated radiotherapy reduces radiation-induced morbidity and improves health-related quality of life: Results of a nonrandomized prospective study using a standardized follow-up program. *International Journal of Radiation Oncology, Biology, Physics*, 74(1), 1-8. *Exclude: Included in systematic review (Scott-Brown 2010)*
- Vermeulen S, Cotrutz C, Morris A, Meier R, Buchanan C, Dawson P and Porter B (2011) Accelerated partial breast irradiation: using the CyberKnife as the radiation delivery platform in the treatment of early breast cancer. *Frontiers in Radiation Oncology*, 1, 43. *Exclude: Intervention not of interest (CyberKnife)*
- Vora, S. A., Wong, W. W., Schild, S. E., Ezzell, G. A., & Halyard, M. Y. (2007). Analysis of biochemical control and prognostic factors in patients treated with either low-dose three-dimensional conformal radiation therapy or high-dose intensity-modulated radiotherapy for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 68(4), 1053-1058. *Exclude: Date*
- Wagner, D., Christiansen, H., Wolff, H., & Vorwerk, H. (2009). Radiotherapy of malignant gliomas: Comparison of volumetric single arc technique (RapidArc), dynamic intensity-modulated technique and 3D conformal technique. *Radiotherapy & Oncology*, 93(3), 593-596. *Exclude: Study size*
- Webb, S, and D McQuaid. (2009). Some considerations concerning volume-modulated arc therapy: A stepping stone towards a general theory." *Physics in Medicine and Biology*, 54(14), 4345-60. *Exclude: Treatment planning*
- Weber, D. C., Peguret, N., Dipasquale, G., & Cozzi, L. (2009). Involved-node and involved-field volumetric modulated arc vs. fixed beam intensity-modulated radiotherapy for female patients with early-stage supra-diaphragmatic hodgkin lymphoma: A comparative planning study. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1578-1586. *Exclude: Study size*
- Weber, D. C., Wang, H., Cozzi, L., Dipasquale, G., Khan, H. G., Ratib, O., . . . Miralbell, R. (2009). RapidArc, intensity modulated photon and proton techniques for recurrent prostate cancer in previously irradiated patients: A treatment planning comparison study. *Radiation Oncology*, 4, 34. *Exclude: Study size*
- Whaley, J.T., Michalski, J. (2011). Preliminary analysis of 3DCRT vs IMRT on the high dose arm of the RTOG 0126 prostate cancer trial: Toxicity report [abstract]. Miami, FL: presented at the Annual Meeting of the American Society for Therapeutic Radiology and Oncology, ASTRO. *Exclude: Study design (abstract)*
- Wolff, D., Stieler, F., Welzel, G., Lorenz, F., Abo-Madyan, Y., Mai, S., . . . Lohr, F. (2009). Volumetric modulated arc therapy (VMAT) vs. serial tomotherapy, step-and-shoot IMRT and 3D-conformal RT for treatment of prostate cancer. *Radiotherapy & Oncology*, 93(2), 226-233. *Exclude: Study size*

- Wu, Q. J., Yoo, S., Kirkpatrick, J. P., Thongphiew, D., & Yin, F. F. (2009). Volumetric arc intensity-modulated therapy for spine body radiotherapy: Comparison with static intensity-modulated treatment. *International Journal of Radiation Oncology, Biology, Physics*, 75(5), 1596-1604. *Exclude: Study size*
- Xie Y, Djajaputra D. (2008). Intrafractional motion of the prostate during hypofractionated radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 72(1), 236-246. *Exclude: Intervention not of interest (Cyberknife)*
- Yamamoto, T., Kabus, S., von Berg, J., Lorenz, C., & Keall, P. J. (2011). Impact of four-dimensional computed tomography pulmonary ventilation imaging-based functional avoidance for lung cancer radiotherapy. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 279-288. *Exclude: Study size*
- Yom SS, Liao Z, Tucker SL, et al. (2007). Initial evaluation of treatment-related pneumonitis in advanced-stage non-small-cell lung cancer patients treated with concurrent chemotherapy and intensity-modulated radiotherapy. *Int J Radiat Oncol Biol Phys*, 68(1), 94-102. *Exclude: Included in systematic review (Veldeman 2008; Staffurth 2010)*
- Yoo, S., Wu, Q. J., Lee, W. R., & Yin, F. F. (2010). Radiotherapy treatment plans with RapidArc for prostate cancer involving seminal vesicles and lymph nodes. *International Journal of Radiation Oncology, Biology, Physics*, 76(3), 935-942. *Exclude: Study size*
- Yovino, S., Poppe, M., Jabbour, S., David, V., Garofalo, M., Pandya, N., . . . Regine, W. F. (2011). Intensity-modulated radiation therapy significantly improves acute gastrointestinal toxicity in pancreatic and ampullary cancers. *International Journal of Radiation Oncology, Biology, Physics*, 79(1), 158-162. *Exclude: Study size (harms)*
- Zelevsky, M. J., Levin, E. J., Hunt, M., Yamada, Y., Shippy, A. M., Jackson, A., & Amols, H. I. (2008). Incidence of late rectal and urinary toxicities after three-dimensional conformal radiotherapy and intensity-modulated radiotherapy for localized prostate cancer. *International Journal of Radiation Oncology, Biology, Physics*, 70(4), 1124-1129. *Exclude: Date*
- Zhang, Pengpeng, et al. (2010). Optimization of collimator trajectory in volumetric modulated arc therapy: Development and evaluation for paraspinal SBRT. *International Journal of Radiation Oncology, Biology, Physics*, 77(2), 591-9. *Exclude: Intervention not of interest (SBRT)*
- Zhang, P., Happersett, L., Hunt, M., Jackson, A., Zelevsky, M., & Mageras, G. (2010). Volumetric modulated arc therapy: Planning and evaluation for prostate cancer cases. *International Journal of Radiation Oncology, Biology, Physics*, 76(5), 1456-1462. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=medl&AN=19540062>  
*Exclude: Study size*
- Zietman, A.L., DeSilvio, M.L., Slater, J.D., Rossi, C.J., Miller, D.W., Adams, J.A., et al. (2005). Comparison of conventional-dose vs high-dose conformal radiation therapy in clinically localized adenocarcinoma of the prostate: A randomized controlled trial. *Journal of the American Medical Association*, 294(10), 1233-9. *Exclude: Treatment planning*
- Zimmerman, Jens, et al. (2009). DMLC motion tracking of moving targets for intensity modulated arc therapy treatment – a feasibility study. *Acta Oncologica*, 48(), 245-250. *Exclude: Treatment planning*
- Zimmermann, Wulf, Lax, Nagata, Timmerman, Stojkovski et al. (2010). Stereotactic body radiation therapy for early non-small cell lung cancer. *Frontiers of Radiation Therapy and Oncology*, 42, 94-114. *Exclude: Intervention not of interest (SBRT)*