

PUBLICATIONS

BOOK ARTICLES

Schneider U, Pedroni E. Quantitative Proton Radiography. In: Faulkner K, Carey B, Crellin A, Harrison RM (eds) Quantitative Imaging in Oncology. BIR, London, 1996; 61-63.

Schneider U. Proton radiography. In: , Linz U, ed. Ion Beam Therapy, Chapman and Hall, 1994; 300-307.

REVIEWED PAPERS

2019

Rohrer Bley C, Meier V, Besserer J, Schneider U. Intensity-Modulated Radiation Therapy Dose Prescription and Reporting: Sum and Substance of ICRU Report 83 for Veterinary Medicine. Accepted in Veterinary Radiology & Ultrasound.

Hauri P, Schneider U. Whole-body dose equivalent is similar for 6MV and 15MV intensity-modulated radiation therapy. Journal of Applied Clinical Medical Physics, accepted.

2018

Schneider U, Walsh L, Newhauser W. Tumour size can have an impact on the outcomes of epidemiological studies on second cancers after radiotherapy. Radiat Environ Biophys. 2018 Nov;57(4):311-319. doi: 10.1007/s00411-018-0753-6. Epub 2018 Aug 31.

Hauri P, Schneider U. Whole-body dose and energy measurements in radiotherapy by a combination of LiF:Mg,Cu,P and LiF:Mg,Ti. Z Med Phys. 2018 Apr;28(2):96-109.

Rohrer Bley C, Meier V, Schneider U. Dosimetric benefit of adaptive radiotherapy in the neoadjuvant management of canine and feline thymoma-An exploratory case series. Vet Comp Oncol. 2018 Jan 8. doi: 10.1111/vco.12382.

Schneider U, Vasi F, Schmidli K, Besserer J. Track event theory: A cell survival and RBE model consistent with nanodosimetry. Radiat Prot Dosimetry. 2018, Dec 11. doi: 10.1093/rpd/ncy236.

2017

Hauri P, Hälgl RA, Schneider U. Technical note: No increase in effective dose from half compared to full rotation pelvis cone beam CT. J Appl Clin Med Phys. 2017 Aug 2. doi: 10.1002/acm2.12150.

Schneider U, Vasi F, Besserer J. The probabilities of one- and multi-track events for modeling radiation-induced cell kill. *Radiat Environ Biophys*. 2017 May 19. doi: 10.1007/s00411-017-0697-2.

Hauri P, Hälgl RA, Schneider U. Technical Note: Comparison of peripheral patient dose from MR-guided (60) Co therapy and 6MV linear accelerator IGRT. *Med Phys*. 2017 Apr 24. doi: 10.1002/mp.12293.

Schneider U, Walsh L. Risk of secondary cancers: Bridging epidemiology and modeling. *Phys Med*. 2017 Mar 28. pii: S1120-1797(17)30066-2. doi:10.1016/j.ejmp.2017.03.011.

Schneider U, Ernst M, Hartmann M. The dose-response relationship for cardiovascular disease is not necessarily linear. *Radiat Oncol*. 2017 Apr 27;12(1):74. doi: 10.1186/s13014-017-0811-2.

Schneider CW, Newhauser WD, Wilson LJ, Schneider U, Kaderka R, Miljanić S, Knežević Ž, Stolarczyk L, Durante M, Harrison RM. A descriptive and broadly applicable model of therapeutic and stray absorbed dose from 6 MV to 25 MV photon beams. *Med Phys*. 2017 Apr 21. doi: 10.1002/mp.12286.

Stokkevåg CH, Schneider U, Muren LP, Newhauser W. Radiation-induced cancer risk predictions in proton and heavy ion radiotherapy. *Phys Med*. 2017 May 13. pii: S1120-1797(17)30109-6. doi: 10.1016/j.ejmp.2017.04.022.

2016

Zwahlen DR, Bischoff LI, Gruber G, Sumila M, Schneider U. Estimation of second cancer risk after radiotherapy for rectal cancer: comparison of 3D conformal radiotherapy and volumetric modulated arc therapy using different high dose fractionation schemes. *Radiat Oncol*. 2016 Nov 10;11(1):149.

Schneider U, Vasi F, Besserer J. The Impact of the Geometrical Structure of the DNA on Parameters of the Track-Event Theory for Radiation Induced Cell Kill. *PLoS One*. 2016 Oct 19;11(10):e0164929. doi: 10.1371/journal.pone.0164929.

Hauri P, Hälgl RA, Besserer J, Schneider U. A general model for stray dose calculation of static and intensity-modulated photon radiation. *Med Phys*. 2016 Apr;43(4):1955. doi: 10.1118/1.4944421.

Schneider U, Hälgl RA, Baiocco G, Lomax T. Neutrons in proton pencil beam scanning: parameterization of energy, quality factors and RBE. *Phys Med Biol*. 2016 Aug 3;61(16):6231-6242.

Schneider U, Hälgl RA, Lomax T. Neutrons in active proton therapy: Parameterization of dose and dose equivalent. *Z. Med. Phys.* (2016) <http://dx.doi.org/10.1016/j.zemedi.2016.07.001>

Walsh L, Schneider U. The influence of follow-up on DS02 low-dose ranges with a significant excess relative risk of all solid cancer in the Japanese A-bomb survivors. *Radiat Environ Biophys*. 2016 Sep 1.

2015

Schneider U and Hälgl R. The impact of neutrons in clinical proton therapy. *Front. Oncol.* 2015, 5:235. doi:10.3389/fonc.2015.00235

Schneider U, Hälgl R, Besserer J. Concept for quantifying the dose from image guided radiotherapy. *Radiation Oncology.* 2015, 10:188

Schneider U, Walsh L. Age at exposure and attained age variations of cancer risk in the Japanese A-bomb and radiotherapy cohorts. *Med Phys.* 2015 Aug;42(8):4755.

Besserer J, Schneider U. Track-event theory of cell survival with second-order repair. *Radiat Environ Biophys.* 2015 May;54(2):167-74.

Besserer J, Schneider U. A track-event theory of cell survival. *Z Med Phys.* 2015 Jun;25(2):168-75.

Beckmann K, Carrera I, Steffen F, Golini L, Kircher PR, Schneider U, Bley CR. A newly designed radiation therapy protocol in combination with prednisolone as treatment for meningoencephalitis of unknown origin in dogs: a prospective pilot study introducing magnetic resonance spectroscopy as monitor tool. *Acta Vet Scand.* 2015 Jan 31;57:4.

2014

Schneider U, Sumila M, Robotka J, Weber D, Gruber G. Radiation-induced second malignancies after involved-node radiotherapy with deep-inspiration breath-hold technique for early stage Hodgkin Lymphoma: a dosimetric study. *Radiat Oncol.* 2014 Feb 18;9(1):58.

Hälgl RA, Besserer J, Boschung M, Mayer S, Lomax AJ, Schneider U. Measurements of the neutron dose equivalent for various radiation qualities, treatment machines and delivery techniques in radiation therapy. *Phys Med Biol.* 2014 May 21;59(10):2457-68.

Sumila M, Mack A, Schneider U, Storelli F, Curschmann J, Gruber G. Long-term intra-fractional motion of the prostate using hydrogel spacer during Cyberknife® treatment for prostate cancer--a case report. *Radiat Oncol.* 2014 Aug 20;9:186.

2013

Cella L, Conson M, Pressello MC, Molinelli S, Schneider U, Donato V, Orecchia R, Salvatore M, Pacelli R. Hodgkin's lymphoma emerging radiation treatment techniques: trade-offs between late radio-induced toxicities and secondary malignant neoplasms. *Radiation Oncology* 2013, 8:22.

Walsh L, Schneider U. A method for determining weights for excess relative risk and excess absolute risk when applied in the calculation of lifetime risk of cancer from radiation exposure. *Radiat Environ Biophys.* 2013 Mar;52(1):135-45.

Fuji H, Schneider U, Ishida Y, Konno M, Yamashita H, Kase Y, Murayama S, Onoe T, Ogawa H, Harada H, Asakura H, Nishimura T. Assessment of organ dose reduction and secondary cancer risk associated with the use of proton beam therapy and intensity modulated radiation therapy in treatment of neuroblastomas. *Radiat Oncol*. 2013 Nov 1;8(1):255.

Fischbach M, Hälgl RA, Hartmann M, Besserer J, Gruber G, Schneider U. Measurement of skin and target dose in post-mastectomy radiotherapy using 4 and 6 MV photon beams. *Radiat Oncol*. 2013 Nov 16;8(1):270.

Schneider U, Hälgl RA, Hartmann M, Mack A, Storelli F, Joosten A, Möckli R, Besserer J. Accuracy of out-of-Field Dose Calculation of Tomotherapy and Cyberknife Treatment Planning Systems: A Dosimetric Study. *Z Med Phys*. 2013 Nov 28. pii: S0939-3889(13)00132-3.

2012

Hälgl, R, Besserer J, Schneider U. Systematic measurements of whole-body imaging dose distributions in image-guided radiation therapy. *Med Phys*. 2012 39(12):7650-7661.

Hälgl, R, Besserer J, Schneider U. Systematic measurements of whole-body dose distributions for various treatment machines and delivery techniques in radiation therapy. *Med Phys*. 2012 39(12):7662-7676.

Schneider U, Schäfer B. Model of accelerated carcinogenesis based on proliferative stress and inflammation for doses relevant to radiotherapy. *Radiat. Environ. Biophys*. 2012 51:451–456.

Hälgl, R, Besserer J, Boschung M, Mayer S, Clasié B, Kry S, Schneider U. Field calibration of PADC track etch detectors for local neutron dosimetry in man using different radiation qualities. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*. 1986 Dec 15;253(1):61-64.

Paganetti H, Athar BS, Moteabbed M, A Adams J, Schneider U, Yock TI. Assessment of radiation-induced second cancer risks in proton therapy and IMRT for organs inside the primary radiation field. *Phys Med Biol*. 2012 Oct 7;57(19):6047-61.

Hälgl, R, Besserer J, Boschung M, Mayer S, Schneider U. Monitor units are not predictive of neutron dose for high-energy IMRT. *Radiation Oncology* 2012 7:138..

Schneider U, Besserer J, Hartmann M. Technical Note: Spatial resolution of proton tomography: Impact of air gap between patient and detector. *Med Phys*. 2012 Feb;39(2):798.

Schneider U, Pedroni E, Hartmann M, Besserer J, Lomax T. Spatial resolution of proton tomography: methods, initial phase space and object thickness. *Z Med Phys*. 2012 Jun;22(2):100-8.

Bartkowiak D, Humble N, Suhr P, Hagg J, Mair K, Polivka B, Schneider U, Bottke D, Wiegel T. Second cancer after radiotherapy, 1981-2007. *Radiother Oncol*. 2012 Oct;105(1):122-6.

2011

Schneider U. Modeling the Risk of Secondary Malignancies after Radiotherapy. *Genes* 2011, 2, 1033-1049.

Schneider U, Sumila M, Robotka J. Site-specific dose-response relationships for cancer induction from the combined Japanese A-bomb and Hodgkin cohorts for doses relevant to radiotherapy. *Theor Biol Med Model*. 2011 Jul 26;8:27.

Schneider U, Sumila M, Robotka J, Gruber G, Mack A, Besserer J. Dose-response relationship for breast cancer induction at radiotherapy dose. *Radiat Oncol*. 2011 Jun 8;6:67.

Hälg RA, Besserer J, Schneider U. Comparative simulations of neutron dose in soft tissue and phantom materials for proton and carbon ion therapy with actively scanned beams. *Med Phys*. 2011 Jun;38(6):3149-56.

2010

Schneider U, Stipper A., Besserer J. Dose-response relationship for lung cancer induction at radiotherapy dose. *Z Med Phys*. 2010;20:206-214.

Schneider U, Besserer J, Mack A. Hypofractionated radiotherapy has the potential for second cancer reduction. *Theor Biol Med Model*. 2010 Feb 11;7(1):4.

2009

Pfaffenberger A, Schneider U, Poppe B, Oelfke U. Phenomenological modelling of second cancer incidence for radiation treatment planning. *Z Med Phys*. 2009;19(4):236-50.

Mayer-Stankeová S, Fidel J, Wergin MC, Hauser B, Sumová A, Goitein G, Pedroni E, Lomax AJ, Schneider U, Blattmann H, Kaser-Hotz B. Proton spot scanning radiotherapy of spontaneous canine tumors. *Vet Radiol Ultrasound*. 2009 May-Jun;50(3):314-8.

Schneider U. Mechanistic model of radiation induced cancer after fractionated radiotherapy using the linear-quadratic formula. *Med Phys*. 2009, 36(4):1138-1143.

Zwahlen DR, Ruben JD, Jones P, Gagliardi F, Millar JL, Schneider U. Effect of intensity-modulated pelvic radiotherapy on second cancer risk in the postoperative treatment of endometrial and cervical cancer. *Int J Radiat Oncol Biol Phys*. 2009 Jun 1;74(2):539-45.

Schneider U, Walsh L. Cancer risk above 1 Gy and the impact for space radiation protection. *Advances in Space Research* 44 (2009) 202–209.

2008

Schneider U, Lomax A, Timmermann B. Second cancers in children treated with modern radiotherapy techniques. *Radiother Oncol*. 2008 Nov;89(2):135-40.

Schneider U, Walsh L. Cancer risk estimates from the combined Japanese A-bomb and Hodgkin cohorts for doses relevant to radiotherapy. *Radiat Environ Biophys*. 2008 Apr;47(2):253-63.

Oertel S, Schneider U, Keel M, Lütolf UM, Bosshard G. Prophylaxis of Heterotopic Ossification in Patients Sedated after Polytrauma: Medical and Ethical Considerations. *Strahlenther Onkol*. 2008, 184(4):212-217.

Zwahlen DR, Martin JM, Millar JL, Schneider U. Effect of radiotherapy volume and dose on secondary cancer risk in stage I testicular seminoma. *Int J Radiat Oncol Biol Phys*. 2008, 70(3):853-854.

2007

Vaudaux C, Kaser-Hotz B, Schneider U. Potential for intensity modulated radiation therapy to permit dose escalation for canine nasal cancer. *Veterinary Radiology & Ultrasound* 2007, 48(5): 475–481.

Ganter M, Schneider U, Heinzelmann M, Zaugg M, Lucchinetti E, Zollinger A, Hofer C. How often should we perform an arterial blood gas analysis during thoracoscopic surgery? *Journal of Clinical Anesthesia* 2007, 19: 569–575.

Schneider U, Lomax A, Besserer J, Pemler P, Lombriser N, Kaser-Hotz B. The impact of dose escalation on secondary cancer risk after radiotherapy of prostate cancer. *Int J Radiat Oncol Biol Phys* 2007, 68(3): 892-897.

Durante M, Kraft G, O'Neill P, Reitz G, Sabatier L, Schneider U. Preparatory study of a ground-based space radiobiology program in Europe. *Advances in Space Research* 2007, 39: 1082-1086.

Crescenti R, Scheib S, Schneider U, Gianolini S. Introducing gel dosimetry in a clinical environment: Customization of polymer gel composition and magnetic resonance imaging parameters used for 3D dose verifications in radiosurgery and intensity modulated radiotherapy. *Med Phys* 2007, 34(4):1286-1297.

2006

Pemler P, Besserer J, Schneider U, Neuenschwander H. Evaluation of a commercial electron treatment planning system based on Monte Carlo techniques (eMC). *Z. Med. Phys*. 2006; 16:313–329.

Schneider U, Lomax A, Pemler P, Besserer J, Ross D, Lombriser N, Kaser-Hotz B. The Impact of IMRT and Proton Radiotherapy on Secondary Cancer Incidence. *Strahlenther Onkol* 2006;182:647–52.

Steneker M, Lomax A, Schneider U. Intensity modulated photon and proton therapy for the treatment of head and neck tumors. *Radiother Oncol*. 2006, 80(2):263-267.

Schneider U, Lomax A, Hauser B, Kaser-Hotz B. Is the risk for secondary cancers after proton therapy enhanced distal to the Planning Target Volume? A two-case report with possible explanations. *Radiat Environ Biophys* 2006, 45:39-43.

2005

Schneider U, Kaser-Hotz B. Radiation risk estimates after radiotherapy: application of the organ equivalent dose concept to plateau dose-response relationships. *Radiat Environ Biophys* 2005 Dec 44(3):235-2399.

Schneider U, Zwahlen D, Ross D, Kaser-Hotz B. Estimation of radiation induced cancer from 3D-dose distributions: A concept of organ equivalent dose. *Int J Radiat Oncol Biol Phys* 2005, 61: 1510-1515.

Schneider U, Kaser-Hotz B. A simple dose-response relationship for modeling secondary cancer incidence after radiotherapy. *Z Med Phys* 2005 158(1): 31-37.

Schneider U. Dose-response relationship for radiation induced cancer – Decrease or plateau at high dose. *Int J Rad Onc Biol Phys* 2005 61:312-313.

Schneider U, Pemler P, Besserer J, Pedroni E, Lomax A, Kaser-Hotz B. Patient specific optimization of the relation between CT-Hounsfield units and proton stopping power with proton radiography. *Med Phys* 2005 32(1): 195-199.

Tourovsky A, Lomax AJ, Schneider U, Pedroni E. Monte Carlo dose calculations for spot scanned proton therapy. *Phys Med Biol* 2005 50(5): 971-81.

2004

Schneider U, Fiechtner A, Besserer J, Lomax A. Neutron dose from prostheses material during radiotherapy with protons and photons. *Phys Med Biol* 2004 49: 119–124.

Schneider U, Dellert M, Pedroni E, Pemler P, Besserer J, Moosburger M, Kaser-Hotz B. First proton radiography of an animal patient. *Med Phys* 2004 31(5): 1046-1051.

Weber D, Rutz H-P, Lomax A, Schneider U, Lombriser N, Zenhauser R, Goitein G. First spinal axis segment irradiation with spot-scanning proton beam delivered in the treatment of a lumbar primitive neuroectodermal tumour: case report and review of the literature. *Clinical Oncology* 2004 16: 326-331.

2003

Schneider U, Dellert M, Pedroni E, Pemler P, Besserer J, Moosburger M, Theiler P, Kaser-Hotz B. 2003 Quantitative proton radiography of an animal patient. *Progress in biomedical optics and imaging* 4(21) 585-592.

Taussky D, Schneider U, Rousson, Pescia R. Patient reported toxicity correlated to dose volume histograms of the rectum in radiotherapy of the prostate. *American Journal of Clinical Oncology* 2003 26(5): 144-149.

2002

Schneider U, Pemler P, Besserer J, Dellert M, Moosburger M, de Boer J, Pedroni E, Boehringer T. The water equivalence of solid materials used for dosimetry with small proton beams. *Med Phys* 2002; 29(12):2946-2951.

Schneider U, Agosteo S, Pedroni E, Besserer J. Secondary neutron dose during proton therapy using spot scanning. *Int J Radiation Oncology Biol Phys* 2002; 53(1): 244-251.

Miralbell R, Lomax A, Cella L, Schneider U. Potential reduction of the incidence of radiation-induced second cancers by using proton beams in the treatment of pediatric tumors. *Int J Radiat Oncol Biol Phys*. 2002 Nov 1;54(3):824-9.

Kaser-Hotz B, Sumova A, Lomax A, Schneider U, Klink B, Fidel J, Blattmann H. A comparison of normal tissue complication probability of brain for proton and photon therapy of canine nasal tumors. *Vet Radiol Ultrasound* 2002; 43(5):480-6.

2001

Schneider U, Besserer J, Pemler P. On small angle multiple Coulomb scattering of protons in the Gaussian approximation. *Z Med Phys* 2001; 11:110-118.

Schneider U, Besserer J, Erckes C, Pemler P, Reponen J. CT based lung density correction verification with in vivo dosimetry using diodes. *Z Med Phys* 2001; 11:257-260.

Pemler P, Schneider U, Besserer J. Evaluation des Elektronendichte-Phantoms CIRS Model 62. *Z Med Phys* 2001; 11:25-32.

Pemler P, Besserer J, Lombriser N, Pescia R, Schneider U. Influence of respiration-induced organ motion on dose distributions in treatments using enhanced dynamic wedges. *Med Phys* 2001; 28(11):2234-2240.

2000

Schneider U, Lomax A, Lombriser N. Comparative Risk Assessment of Secondary Cancer Incidence after Treatment of Hodgkin's Disease with Photon and Proton Radiation. *Rad Res* 2000; 154(4):382-388.

Lomax A, Logean M, Tercier PA, Cozzi L, Schneider U, Boehringer T, Volken W, Ratib O, Mirabell R. The exchange of radiotherapy data as a part of an electronic patient referral system. *Int J Rad Onc Biol Phys* 2000; 47(5):1443-1448.

1999

Pemler P, Besserer J, de Boer J, Dellert M, Gahn C, Moosburger M, Schneider U, Pedroni E, Stäuble H A detector system for fast in vivo proton radiography on the gantry of the Paul Scherrer Institute. *NIM A* 1999; 432(2-3):483-495.

Schaffner B, Schneider U, Pescia R. 3D Verifikation der 5-Felder-Bestrahlung des Mammakarzinoms mit Filmdosimetrie. Z Med Phys 1999; 9:106-112.

1998

Schneider U, Schaffner B, Lomax A, Pedroni E, Tourovsky A. A technique for calculating range spectra of charged particle beams distal to thick inhomogeneities. Med Phys 1998; 25(4):457-463.

Schneider U, Tourovsky A. Range-uncertainty imaging for obtaining dose perturbations in proton therapy. IEEE Trans Nucl Sci 1998; 45(5):2309-2313.

1997

Schneider U, Renker D. Proton energy measurements using a NaI(Tl) scintillator. NIM A 1997; 388:199-203.

1996

Schneider U. Protonenradiographie. Z Med Phys 1996; 5:187-194.

Schneider U, Pedroni E, Lomax A. The calibration of CT-Hounsfield units for radiotherapy treatment planning. Phys Med Biol 1996; 41:111-124.

Schneider U. On the calibration of CT-Hounsfield units for radiotherapy treatment planning. Phys Med Biol 1996; 41 (letter to the editor):1526-1527.

1995

Pedroni E, Bacher R, Blattmann H, Boehringer T, Coray A, Lomax A, Lin S, Munkel G, Scheib S, Schneider U, Tourovsky A. The 200 MeV proton therapy project of PSI: conceptual design and practical realization. Med Phys 1995; 22(1):37-53.

1994

Schneider U, Pedroni E. Multiple Coulomb Scattering and Spatial Resolution in Proton Radiography. Med Phys 1994; 21(11):1657-1663.

Schneider U, Pedroni E. Proton Radiography as a tool for quality control in proton therapy. Med Phys 1994; 22(4):353-363.

1992

Schneider U, de la Torre Juarez M, Zimmermann W, Rehberg I. Phase shift of dielectric rolls in electroconvection. Phys Rev A 1992; 46(2):1009-1013.

1990

Schneider U. Baroclinic zonal currents in rotating stars. *Astron Astrophys* 1990; 238:142-144.

PROCEEDINGS

2013

Hartmann M, Schneider U. Cancer Integration of second cancer risk calculations in a radiotherapy treatment planning system. ICCR, 6-9.05.2013, Melbourne, Australien

Hälg R, Bashkirov, V, Schulte R, Schneider U., Lomax T. Retrospective Neutron Dose Characterization for Pediatric Proton Therapy. Geant4 2013 International User Conference Bordeaux

Schneider U. IMRT, IGRT, protons and the risk of second cancers. 17th Annual SASRO Meeting 4 – 6 July 2013, Davos, Switzerland.

Schneider U. Proton Radiography and Tomography. Particle Radiosurgery conference, August 25-29 2013, Universitätszentrum Obergurgl, Austria

2012

Schneider U., Walsh L. Cancer risk above 1 Gy and the impact for space radiation protection, ICTR-PHE meeting, 27.02-02.03.2012, Geneva, Switzerland.

Fuji H., Schneider U., Ishida Y, Konno Y. Reduction of organ doses and secondary cancer risks by proton beam therapy and intensity modulated radiation therapy in treatment of neuroblastoma., ASTRO 2012, USA

Schneider U. (invited talk) Normal tissue damage – models of second tumor induction after radiotherapy. 39th annual meeting of the European radiation Research (ERR) society, Vietri sul Mare, October 15-19, 2012.

Schneider U. (invited talk) Models for secondary cancer induction at radiotherapy dose. An update. ESTRO 31, 9-13 May, 2012 Barcelona, Spain.

2011

Dörr, W., Bartkowiak, D., Grantzau, T., Jerezek-Fossa, B. A., Schneider, U. Second cancers after radiation therapy – potentials and pitfalls of the analyses of clinical databases. *Radiother.Oncol.* 99, Suppl. 1, 2011, S47: ESTRO Anniversary Meeting, London, UK, 08.-12.05.2011

Schneider U., Pedroni E, Hartmann M, Besserer J, Lomax T. Spatial resolution of proton tomography: methods, initial phase space and object thickness, AAPM 53rd annual meeting, 31.07-04.08.2011, Vancouver, Canada.

Schneider U., Hartmann M, Besserer J. Spatial resolution of proton tomography: impact of air gap between patient and detector, DGMP/ÖGMP/SGSMP annual meeting, 28.09-01.10.2011, Vienna, Austria.

W. Dörr, D. Bartkowiak, T. Grantzau, B.A. Jereczek-Fossa, U. Schneider. SECOND CANCERS AFTER RADIATION THERAPY – POTENTIAL AND PITFALLS OF THE ANALYSES OF CLINICAL DATABASES. ESTRO Anniversary Meeting, London, UK, 08.-12.05.2011

ROGER talks!!

2010

Schneider U., Sumila M., Robotka J., Gruber G., Mack A., Besserer J. Breast cancer risk after radiotherapy – Fit of a mechanistic model including fractionation to Hodgkin's disease patients. AAPM 52nd annual meeting, Philadelphia, USA

Schneider U. Strategy for modelling cancer risk from calculated organ dose. ALLEGRO meeting, June 2010, Munich, Germany.

Robotka J., Schneider U., Sumila M. Evaluation of a breast cancer induction model with epidemiological data for involved field Hodgkin's disease radiotherapy. ESTRO 29, September 2010, Barcelona, Spain.

Genhart S., Besserer J., Gruber G, Schneider U. Correlation between central lung distance and NTCP for radiation pneumonitis caused by whole breast irradiation.. ESTRO 29, September 2010, Barcelona, Spain

Hälg RA, Besserer J, Mayer S, Schneider U. Comparison of different radiotherapy treatment techniques, radiation qualities and therapy machines with respect to neutron dose. International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry 9-12 November 2010, Vienna, Austria.

2009

Schneider U. Modelling Second Cancers following Radiotherapy, a Comparison of Proton and X-ray Treatments, BIR President's Conference 2009: 19 – 20 May 2009, London, UK

Schneider U. Strategy for modelling cancer risk from calculated organ dose. ALLEGRO meeting, February 2009, Pavia, Italy

2008

Schneider U. Models to predict radiation induced cancer at high dose. ESTRO 27, September 14-17, 2008, Göteborg, Sweden

Schneider U., Lomax A., Timmermann B. Second cancers in children treated with modern radiotherapy techniques. 43th SGSMP annual meeting, Chur, Switzerland.

2007

Zwahlen D, Martin JM, Millar JM, Schneider U. The impact of radiation treatment volume on secondary cancer risk in stage I testicular seminoma. RANZCR 58th scientific meeting, Melbourne, Australia, October 2007.

Schneider U. Radiation-induced Cancers: Is Integral Dose the Ultimate Measure? 9th BIENNIAL ESTRO MEETING, Barcelona, September 2007 (invited talk).

Schneider U. Estimation of radiation-induced cancer from 3D dose distributions: concept of organ equivalent dose. SASRO 11th annual meeting, Aarau, March 2007 (invited talk).

2006

Pfaffenberger A., Schneider U, Poppe B., Oelfke U. Estimating second cancer incidence after radiation therapy. ESTRO 25, Leipzig, October 2006.

Pfaffenberger A., Schneider U, Poppe B., Oelfke U. Modellierung des Zweitkrebsrisikos nach der Strahlentherapie. DGMP annual meeting, Regensburg, September 2006.

Schneider U. Zweitkarzinome nach Strahlentherapie - Implikationen für die Optimierung des Bestrahlungsplanes. DEGRO 2006, Dresden, May 2006.

M.N.J. Steneker, A.J. Lomax, U. Schneider. Intensity modulated photon (IMXT) and proton (IMPT) therapy for the treatment of head and neck tumors. 3rd International Conference on Translational Research and Pre-Clinical Strategies in Radiation Oncology (ICTR), Lugano, 12.-15.03.06.

U. Schneider, A. Lomax, J. Besserer, N. Lombriser, P. Pemler, D. Ross, B. Kaser-Hotz. The impact of dose escalation on secondary cancer risk after radiotherapy of prostate cancer. 3rd International Conference on Translational Research and Pre-Clinical Strategies in Radiation Oncology (ICTR), Lugano, 12.-15.03.06.

2005

Schneider U, Lomax A, Pemler P, Besserer J, Ross D, Lombriser N, Kaser-Hotz B. The concept of organ equivalent dose to estimate secondary cancers applied to radiotherapy of prostate cancer. 10th Workshop on Heavy Charged Particles in Biology and Medicine, Oropa, Italy, June 2005.

Schneider U, Lomax A, Pemler P, Besserer J, Ross D, Lombriser N, Kaser-Hotz B. Radiation induced cancer after radiotherapy: The impact of IMRT and proton radiotherapy. 47th Annual Meeting of the AAPM, Seattle, USA, July 2005.

Schneider U. Modeling secondary cancer risk after radiotherapy. SGSMP annual meeting 2005, Lausanne, November 2005.

2004

Schneider U, Zwahlen D, Ross D, Besserer J, Pemler P, Kaser-Hotz B. Estimation of radiation induced cancer from 3D dose distributions: The concept of organ equivalent dose applied to radiotherapy of prostate cancer. Proceedings of the Annual Meeting of the SGSMP, Bern, Switzerland, October 2004.

Schneider U, Pemler P, Besserer J, Kaser-Hotz B. Estimation of radiation induced organ specific cancer incidence for radiotherapy treatment planning. Proceedings of the 15th Annual NASA Space radiation health investigator's workshop, Port Jefferson, NY, USA, May 2004, Rad. Res.

Scheib G, Cresenti R, Vogelsanger W, Gianolini S, Lomax A, Schneider U. Normoxic Polymer Gel - Basic characterisation and clinical use. Proceedings of the Dosgel 2004, Gent, Belgium, September 2004.

Cresenti R, Scheib S, Lomax A, Schneider U. Magic gel composition and MR imaging parameter optimization for 3-D dose verifications in IMRT, proton therapy and radiosurgery. Proceedings of the Annual Meeting of the SGSMP, Bern, Switzerland, October 2004.

Pemler P, Schneider U, Besserer J. A quality management system for an integrated ROKIS. Proceedings of the Annual Meeting of the SGSMP, Bern, Switzerland, October 2004.

Lomax N, Cozzi L, Fogliata-Cozzi A, Ionescu-Farca F, Roser H, Schneider U, Trueb P. What's what in linac QC according to SGSMP recommendations number 11. Proceedings of the Annual Meeting of the SGSMP, Bern, Switzerland, October 2004

2003

Schneider U. Comparison of the risk of radio-induced carcinogenesis. Can this method be transferred to heavy ion therapy? 9th Workshop on Heavy Charged Particles in Biology and Medicine, Lyon, France October 2003, invited talk.

Schneider U, Dellert M, Pedroni E, Pemler P, Besserer J, Moosburger M, Theiler P, Kaser-Hotz B. Quantitative proton radiography of an animal patient. Proceedings of the Medical Imaging Conference 2003, San Diego, USA, March 2003.

Schneider U, Dellert M, Pedroni E, Pemler P, Besserer J, Moosburger M, de Boer J, Boehringer T. The water equivalence of solid materials used for dosimetry with small proton beam. Abstracts of PTCOG meeting 2003, Chester, England, May 2003.

Taussky D, Schneider U, Pescia R. Is there a dose-volume correlation for patient-reported rectal toxicity in radiotherapy of the prostate? Abstracts of the International Conference on Translational Research and Pre-Clinical Strategies in Clinical Radio-Oncology 2003, Lugano, Switzerland, March 2003.

2002

Mirabell R, Cella L, Lomax A, Schneider U. Potential reduction of the incidence of radiation-induced second cancers by using proton beams in the treatment of pediatric tumors. Abstracts of the XXXVI PTCOG Meeting, Catania, Italy, May 2002.

Schneider U, Dellert M, Pedroni E, Pemler P, Besserer J, Moosburger M, de Boer J, Boehringer T. The water equivalence of solid materials used for dosimetry with small proton beam. Abstracts of annual meeting of DGMP-ÖGMP-SGSMP, Gmunden, Österreich, September 2002.

2001

Schneider U, Agosteo S, Pedroni E, Besserer J. Secondary neutron dose during proton therapy using spot scanning. Proceedings of the Workshop on Radiation Therapy and Dosimetry, München, Bayern, November 2001.

Schneider U, Lomax A, Lombriser N, Pescia R, Ross D. Comparative risk assessment of secondary cancer incidence following photon and proton radiation treatment of Hodgkin's disease. Proceedings of the fifth International Symposium on Hodgkin's Lymphoma, Köln, Germany, September 2001; 102.

Schneider U, Agosteo S, Pedroni E, Besserer J. Secondary neutron dose during proton therapy using spot scanning. Abstracts of the XXXIV PTCOG Meeting, Boston, Massachusetts, June 2001.

Schneider U, Lomax A, Lombriser N. Calculation of second cancer incidence following photon and proton radiation treatment of Hodgkin's disease. Proceedings of the 1st Int. Workshop on Space Radiation Research, Phys Med, 2001;17 Suppl 1:97-9.

2000

Schneider U, Besserer J, Erckes C, Pemler P, Reponen J. Indirect verification of the CadPlan inhomogeneity correction using in vivo dosimetry. Abstracts of the 4th annual meeting of the Scientific Association of Swiss Radiation Oncology, Strahlenther Onkol 2000.

Pemler P, Besserer J, Lombriser N, Schneider U. Dosisverteilung von durch Atmung bewegten Organen bei der Bestrahlung mit Enhanced Dynamic Wedge. Abstracts of the DEGRO and DGMP conference, München, Oktober 2000.

de Boer J, Dellert M, Moosburger M, Besserer J, Pemler P, Schneider U, Pedroni E, Stäuble H. Fast proton radiography on the PSI-gantry. Abstracts of the XXXII PTCOG Meeting, Uppsala Sweden, April 2000.

Reponen J, Schneider U, Ross D, Schnyder F. Multiple field treatment in breast cancer with regional lymph nodes affected: means and methods in Triemli Hospital Zürich. Abstracts of the 4th annual meeting of the Scientific Association of Swiss Radiation Oncology, Strahlenther Onkol 2000.

Taussky D, Schneider U, Reponen J, Besserer J, Pemler P, Ross D, Lombriser N, Pescia R. Analysis of dose volume histograms of different rectal structures to predict acute toxicity in conformal radiotherapy of the prostate. Abstracts of the ICRT 2000 conference, Lugano, Int J Rad Onc 2000; 46-3:753.

Taussky D, Schneider U, Pemler P, Besserer J, Ross D, Lombriser N, Pescia R. An approximative model to measure the dose to the rectal surface in radiotherapy of the prostate. Abstracts of the UICC Prostate Cancer Meeting, Eilat, Israel, January 2000.

1999

Schneider U, Lomax A, Lombriser N. Comparative treatment planning using calculations of secondary cancer incidence", Abstracts of the 41st AAPM meeting, Nashville, USA, July 1999.

Schneider U, Lomax A, Lombriser N. Calculation of second cancer incidence following photon and proton radiation treatment of Hodgkin's disease. Abstracts of the 3rd annual meeting of the Scientific Association of Swiss Radiation Oncology, Strahlenther Onkol 1999; 175:202.

1998

de Boer J, Besserer J, Dellert M, Graw G, Moosburger M, Gahn C, Pedroni E, Stäuble H, Pemler P, Schneider U. Proton Radiography at PSI. Abstracts of the XXVIII PTCOG Meeting, Palm Springs California, April 1998.

1997

Schneider U, Tourovsky A, Pedroni E, Lomax T. Schaffner B. A comparison of different techniques for the calculation of proton dose distributions using spot scanning. Presented at the XII ICCR conference, Salt Lake City, USA, May 1997.

Moosburger M, Besserer J, de Boer J, Dellert M, Gahn C, Pemler P, Schneider U, Pedroni E, Stäuble H. A detector system for proton radiography at the Paul Scherrer Institute. Abstract of the 6th Workshop on Heavy-Charged Particles in Biology and Medicine, Baveno September 1997.

Mirabell R, Ratib O, Lomax A, Cozzi L, Tercier PA, André L, Böhringer T, Schneider U, Squarcia S. The CHAMPOLLION-II project: A software to exchange data of various treatment planning systems for the Swiss proton network. Radiotherapy & Oncology 1997; 43(supplement 2):S66.

1995

Schneider U, Pedroni E. Quantitative Proton Radiography. In: Quantitative Imaging in Oncology, Proceedings of the 19th L H Gray Conference, Newcastle 1995; 61-63.

Schneider U, Pedroni P, Lomax A, Pemler P, Schaffner B. The Calibration of CT-units to Proton Stopping power for Proton Therapy Treatment Planning. Abstracts of the XXII PTCOG Meeting, San Francisco California, April 1995.

Schneider U, Tourovsky A, Pedroni E, Lomax A. The relationship between range- and dose-variations for proton therapy. Abstracts of the Röntgen Centenary Congress, Würzburg, September 1995.

Lomax A, Pedroni E, Schaffner B, Scheib S, Schneider U, Tourovsky A. 3 D Treatment planning for conformal proton therapy by spot scanning. In: Quantitative Imaging in Oncology, Proceedings of the 19th L H Gray Conference, Newcastle 1995, 67-71.

Pemler P, Schneider U, Pedroni E, de Boer J. Fast proton radiography on the PSI gantry (FROG). Abstract of the 5th workshop on heavy charged particles in biology and medicine, Darmstadt, August 1995.

Pemler P, Schneider U, Pedroni E, de Boer J. Fast proton radiography on the PSI gantry. Abstracts of the XXIII PTCOG Meeting, Cape Town, South Africa, October 17-19 1995.

1994

Lomax A, Scheib S, Munkel G, Blattmann H, Boehringer T, Coray A, Lin S, Pedroni E, Schneider U. The comparison of spot scanning proton radiotherapy with conventional photon therapies. Proceedings for XIth ICCR, Manchester, March 1994.

Lomax A, Scheib S, Munkel G, Blattmann H, Boehringer T, Coray A, Lin S, Pedroni E, Schneider U. Proton therapy using spot scanning: Determination of possible indications using cooperative treatment planning. Proceedings of the 13th Annual ESTRO Meeting, Granada, Spain, 26-29, Sept. 1994.

Pedroni E, Blattmann H, Böhringer T, Coray A, Lomax A, Lin S, Munkel G, Scheib S, Schneider U. Implementing treatment planning for scanned beams on the PSI compact gantry. NIRS International Seminar on the Application of Heavy Ion accelerators to Radiation Therapy of Cancer, National Institute of Radiological Sciences, Chiba, Japan, Nov. 1994.

1993

Schneider U, Pedroni E. Proton Radiography. Abstracts of the 24th Conference of the German Society of Medical Physics, Erlangen, Oct. 262, 1993.

Schneider U, Tourovsky A, Pedroni E. Proton Radiography: A tool for quality control in proton therapy. Abstracts of the XIX PTCOG Meeting, Cambridge Massachusetts, Nov. 1993.

Lomax A, Blattmann H, Boehringer T, Coray A, Lin S, Schneider U. 3-Dimensional Conformal Proton Radiotherapy by Voxel Scanning and its comparison to conventional Photon Therapies. 3D Treatment Planning and Conformal Therapy Meeting, London, March 1993.

Munkel G, Lomax A, Scheib S, Schneider U, Ulmer U, Blattmann H. Organ Motion & 3-d Conformation Radiotherapy and Intercomparison of Photon and Proton Dose Distributions. Proceedings of the EORTC-Meeting, Brussel, March 1993.

Blattmann H, Munkel G, Pedroni E, Boehringer T, Coray A, Egger E, Lin S, Lomax A, Scheib S, Schneider U, Ulmer U. Radiation medicine projects at PSI. Status Report. Abstracts of the XVII PTCOG Meeting, Orsay, Nice, France, April 16-19, 1993.

Pedroni E, Blattmann H, Boehringer T, Coray A, Lin S, Lomax A, Munkel G, Scheib S, Schneider U. Treatment Planning for Spot Scanning: Present and Future Developments at PSI. Abstracts of the XVII PTCOG Meeting, Orsay, Nice, France, April 16-19, 1993.

Munkel G, Ulmer U, Lomax A, Schneider U, Scheib S, Coray A, Boehringer T, Pedroni E, Blattmann H, Magdeburg W, Lütolf UM, Meier D, Boesiger P. The Impact of Physiological Organ Movements on 3-D Conformation Radiotherapy. In: Minet P, ed. Three-Dimensional Treatment Planning, 5th workshop of the European Association of Radiology, Liege, 1993.

Pedroni E, Blattmann H, Boehringer T, Coray A, Lin S, Lomax A, Munkel G, Scheib S, Schneider U. 3D Conformal Radiotherapy by Dynamic Proton Beam Scanning on a Compact Isocentric Gantry. Abstract for 7th European Conference of Clinical Oncology and Cancer Nursing, Jerusalem, Nov. 14.-18. 1993.

Pedroni E, Blattmann H, Boehringer T, Coray A, Lin S, Lomax A, Munkel G, Scheib S, Schneider U, Tourovsky A. The PSI Proton Unit for Medical Application. Abstracts of the XIX PTCOG Meeting, Cambridge Massachusetts, Nov. 1993.

Munkel G, Lomax A, Scheib S, Schneider U, Ulmer U, Blattmann H. Indications for Proton Therapy. Proceedings of the International Symposium on Hadron Therapy, Como, Oct. 1993.

1992

Munkel G, Ulmer U, Schneider U, Scheib S, Coray A, Boehringer T, Pedroni E, Blattmann H, Magdeburg W, Lütolf UM, Meier D, Bösiger P. The Impact of Physiological Organ Movements on 3-D Conformation Radiotherapy. Abstracts of the 5th Workshop on three-dimensional Treatment Planning, Geneva, 1992.

Scheib S, Pedroni E, Blattmann H, Boehringer T, Coray A, Lin S, Munkel G, Schneider U. 3-D Treatment Planning and 3D-dose Optimization for Conformal Proton Therapy by Voxel Scanning. Abstracts of the 5th Workshop on three-dimensional Treatment Planning, Geneva, 1992.

1991

Pedroni E, Blattmann H, Boehringer T, Coray A, Lin S, Scheib S, Schneider U. Voxel Scanning for proton therapy. Proceedings for NIRS International Workshop on Heavy Charged Particle Therapy and Related Subject, 1991.

Pedroni E, Blattmann H, Munkel G, Böhringer T, Coray A, Lin S, Scheib S, Schneider U, Enge H,. Beam Optics Design of a Compact Gantry for Proton Therapy at PSI. Extended Abstracts of the Fourth Workshop on heavy charged particles in biology and medicine 1991; GSI-91-29:K5.

Pedroni E, Blattmann H, Böhringer T, Coray A, Lin S, Munkel G, Scheib S, Schneider U. Protonentherapieprojekt am PSI: Zustandsbericht 8/1991. Abstracts of the Wissenschaftliche Tagung der Schweizerischen Gesellschaft für Strahlenbiologie und Medizinische Physik 1991; 151.

Pedroni E, Blattmann H, Böhringer T, Coray A, Lin S, Munkel G, Scheib S, Schneider U. The 200 MeV Proton Therapy Project at PSI: A Status Report. Abstract for SGSMP-Jahrestagung, 1991.