



## Publication list for Ion Research at Heidelberg University Hospital (Status July 2016)

1. Niklas M, Zimmermann F, Schlegel J, Schwager C, Debus J, Jakel O, et al. Registration procedure for spatial correlation of physical energy deposition of particle irradiation and cellular response utilizing cell-fluorescent ion track hybrid detectors. *Physics in medicine and biology*. 2016;61(17):N441-N60.
2. Mohr A, Chaudhri N, Hassel JC, Federspil PA, Vanoni V, Debus J, et al. Raster-scanned intensity-controlled carbon ion therapy for mucosal melanoma of the paranasal sinus. *Head & neck*. 2016;38 Suppl 1:E1445-51.
3. Mairani A, Dokic I, Magro G, Tessonier T, Kamp F, Carlson DJ, et al. Biologically optimized helium ion plans: calculation approach and its in vitro validation. *Physics in medicine and biology*. 2016;61(11):4283-99.
4. Kurz C, Bauer J, Unholtz D, Richter D, Herfarth K, Debus J, et al. Initial clinical evaluation of PET-based ion beam therapy monitoring under consideration of organ motion. *Medical physics*. 2016;43(2):975-82.
5. Jensen AD, Poulakis M, Vanoni V, Uhl M, Chaudhri N, Federspil PA, et al. Carbon ion therapy (C12) for high-grade malignant salivary gland tumors (MSGTs) of the head and neck: do non-ACCs profit from dose escalation? *Radiation oncology*. 2016;11(1):90.
6. Jensen AD, Poulakis M, Nikoghosyan AV, Welzel T, Uhl M, Federspil PA, et al. High-LET radiotherapy for adenoid cystic carcinoma of the head and neck: 15 years' experience with raster-scanned carbon ion therapy. *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*. 2016;118(2):272-80.
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9. Habl G, Uhl M, Katayama S, Kessel KA, Hatiboglu G, Hadaschik B, et al. Acute Toxicity and Quality of Life in Patients With Prostate Cancer Treated With Protons or Carbon Ions in a Prospective Randomized Phase II Study-The IPI Trial. *International journal of radiation oncology, biology, physics*. 2016;95(1):435-43.
10. Glowa C, Karger CP, Brons S, Zhao D, Mason RP, Huber PE, et al. Carbon ion radiotherapy decreases the impact of tumor heterogeneity on radiation response in experimental prostate tumors. *Cancer letters*. 2016;378(2):97-103.
11. Giovannini G, Bohlen T, Cabal G, Bauer J, Tessonier T, Frey K, et al. Variable RBE in proton therapy: comparison of different model predictions and their influence on clinical-like scenarios. *Radiation oncology*. 2016;11:68.
12. Gianoli C, Kurz C, Riboldi M, Bauer J, Fontana G, Baroni G, et al. Clinical evaluation of 4D PET motion compensation strategies for treatment verification in ion beam therapy. *Physics in medicine and biology*. 2016;61(11):4141-55.
13. Dokic I, Mairani A, Niklas M, Zimmermann F, Chaudhri N, Krunic D, et al. Next generation multi-scale biophysical characterization of high precision cancer particle radiotherapy using clinical proton, helium-, carbon-

and oxygen ion beams. *Oncotarget*. 2016.

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15. Adeberg S, Harrabi SB, Bougatf N, Bernhardt D, Rieber J, Koerber SA, et al. Intensity-modulated proton therapy, volumetric-modulated arc therapy, and 3D conformal radiotherapy in anaplastic astrocytoma and glioblastoma : A dosimetric comparison. *Strahlentherapie und Onkologie : Organ der Deutschen Röntgengesellschaft [et al]*. 2016.
16. Uhl M, Welzel T, Jensen A, Ellerbrock M, Haberer T, Jakel O, et al. Carbon ion beam treatment in patients with primary and recurrent sacrococcygeal chordoma. *Strahlentherapie und Onkologie : Organ der Deutschen Röntgengesellschaft [et al]*. 2015;191(7):597-603.
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