

Publikationen und Abstracts

Jahre 2017-2018

Univ.-Klinik für Nuklearmedizin

Original

1. Lang D, Huber H, Kaiser B, Virgolini I, Lamprecht B, Gabriel M. SUV as a Possible Predictor of Disease Extent and Therapy Duration in Complex Tuberculosis. *Clin Nucl Med.* 2017 Dec 5. *Clin Nucl Med.* 2018 Feb;43(2):94-100.
2. Procalcitonin could potentially replace calcitonin determination for medullary thyroid carcinoma screening and follow-up. Maffey-Steffan S, Moncayo R, Uprimny C, Kroiss AS, Hutter A, Meister A, Griesmacher A; Prokop W; Virgolini IJ. Submitted in *Endocrine* 6.11.2017.
3. Grob NM, Behe M, von Guggenberg E, Schibli R, Mindt TL. Methoxinine - an alternative stable amino acid substitute for oxidation-sensitive methionine in radiolabelled peptide conjugates. *J Pept Sci* 2017, 23(1): 38-44.
4. Haskali MB, Denoyer D, Noonan W, Culinane C, Rangger C, Pouliot N, **Haubner R**, Roselt PD, Hicks RJ, Hutton CA. Sulfonation of Tyrosine as a Method To Improve Biodistribution of Peptide-Based Radiotracers: Novel ¹⁸F-Labeled Cyclic RGD Analogues. *Mol Pharm.* 2017 Apr 3;14(4):1169-1180.
5. Rangger C, Klingler M, Balogh L, Pöstényi Z, Polyak A, Pawlak D, Mikołajczak R, von Guggenberg E. ¹⁷⁷Lu Labeled Cyclic Minigastrin Analogues with Therapeutic Activity in CCK2R Expressing Tumors: Preclinical Evaluation of a Kit Formulation. *Mol Pharm* 2017 14(9):3045-3058
6. von Eyben FE, Virgolini I, Roviello G. Re: Silke Gillissen, Gerhardt Attard, Tomasz M. Beer, et al. Management of Patients with Advanced Prostate Cancer: The Report of the Advanced Prostate Cancer Consensus Conference APCCC 2017. *Eur Urol.* In press. <http://dx.doi.org/10.1016/j.eururo.2017.06.002>. *Eur Urol.* 2017 Aug 28. pii: S0302-2838(17)30696-6. doi: 10.1016/j.eururo.2017.08.010. [Epub ahead of print]
7. Bozkurt MF, Virgolini I, Balogova S, Beheshti M, Rubello D, Decristoforo C, Ambrosini V, Kjaer A, Delgado-Bolton R, Kunikowska J, Oyen WJG, Chiti A, Giammarile F, Sundin A, Fanti S. Erratum to: Guideline for PET/CT imaging of neuroendocrine neoplasms with ⁶⁸Ga-DOTA-conjugated somatostatin receptor targeting peptides and ¹⁸F-DOPA. *Eur J Nucl Med Mol Imaging.* 2017 Nov;44(12):2150-2151.
8. Prause M, Niedermoser S, Wängler C, Decristoforo C, Seibold U, Riester S, Taguchi T, Schirmacher R, Fricker G, Wängler B. Synthesis, in vitro and in vivo evaluation of ¹⁸F-fluoronorimatinib as radiotracer for Imatinib-sensitive gastrointestinal stromal tumors. *Nucl Med Biol.* 2017 Nov 17;57:1-11.

9. Summer D, Garousi J, Oroujeni M, Mitran B, Andersson KG, Vorobyeva A, Löfblom J, Orlova A, Tolmachev V, Decristoforo C. Cyclic versus Noncyclic Chelating Scaffold for ⁸⁹Zr-Labeled ZEGFR:2377 Affibody Bioconjugates Targeting Epidermal Growth Factor Receptor Overexpression. *Mol Pharm.* 2017 Dec 1. doi: 10.1021/acs.molpharmaceut.7b00787. [Epub ahead of print]
10. Summer D, Grossrubatscher L, Petrik M, Michalcikova T, Novy Z, Rangger C, Klingler M, Haas H, Kaeopookum P, von Guggenberg E, Haubner R, Decristoforo C. Developing Targeted Hybrid Imaging Probes by Chelator Scaffolding. *Bioconjug Chem.* 2017 Jun 21;28(6):1722-1733.
11. Petrik M, Zhai C, Haas H, Decristoforo C. Siderophores for molecular imaging applications. *Clin Transl Imaging.* 2017;5(1):15-27.
12. Decristoforo C, Penuelas I, Patt M, Todde S. European regulations for the introduction of novel radiopharmaceuticals in the clinical setting. *Q J Nucl Med Mol Imaging.* 2017 Jun;61(2):135-144.
13. Kroiss AS, Nekolla SG, Dobrozemsky G, Grubinger T, Shulkin BL, Schwaiger M. CT-based SPECT attenuation correction and assessment of infarct size: results from a cardiac phantom study. *Ann Nucl Med.* 2017 Dec;31(10):764-772.
14. Uprimny C, Kroiss AS, Fritz J, Decristoforo C, Kendler D, von Guggenberg E, Nilica B, Maffey-Steffan J, di Santo G, Bektic J, Horninger W, Virgolini IJ. Early PET imaging with ⁶⁸Ga-PSMA-11 increases the detection rate of local recurrence in prostate cancer patients with biochemical recurrence. *Eur J Nucl Med Mol Imaging.* 2017 Sep;44(10):1647-1655.
15. Bozkurt MF, Virgolini I, Balogova S, Beheshti M, Rubello D, Decristoforo C, Ambrosini V, Kjaer A, Delgado-Bolton R, Kunikowska J, Oyen WJG, Chiti A, Giammarile F, Fanti S. Guideline for PET/CT imaging of neuroendocrine neoplasms with ⁶⁸Ga-DOTA-conjugated somatostatin receptor targeting peptides and ¹⁸F-DOPA. *Eur J Nucl Med Mol Imaging.* 2017 Aug;44(9):1588-1601.
16. Fanti S, Minozzi S, Morigi JJ, Giesel F, Ceci F, Uprimny C, Hofman MS, Eiber M, Schwarzenbock S, Castellucci P, Bellisario C, Chauvie S, Bergesio F, Emmett L, Haberkorn U, Virgolini I, Schwaiger M, Hicks RJ, Krause BJ, Chiti A. Development of standardized image interpretation for ⁶⁸Ga-PSMA PET/CT to detect prostate cancer recurrent lesions. *Eur J Nucl Med Mol Imaging.* 2017 Sep;44(10):1622-1635.
17. Fanciulli A, Stefanova N, Scherfler C, Moser P, Seppi K, Gizewski ER, Virgolini I, Boesch S, Poewe W, Wenning GK. Very late-onset pure autonomic failure. *Mov Disord.* 2017 Jul;32(7):1106-1108.
18. Kroiss AS, Uprimny C, Shulkin BL, Frech A, Tilg H, Gasser RW, Sprinzl GM, Gruber L, Thomé C, Plangger C, Url C, Fraedrich G, Virgolini IJ. Compared to ¹²³I-MIBG SPECT/CT, ¹⁸F-DOPA PET/CT provides accurate tumor extent in patients with extra-adrenal paraganglioma. *Ann Nucl Med.* 2017 Jun;31(5):357-365.

19. Haubner R, Schmid AM, Maurer A, Rangger C, Roig LG, Pichler BJ, Virgolini IJ. [68Ga]NOTA-Galactosyl Human Serum Albumin: a Tracer for Liver Function Imaging with Improved Stability. *Mol Imaging Biol.* 2017 Oct;19(5):723-730.
20. Uprimny C, Kroiss AS, Decristoforo C, Fritz J, von Guggenberg E, Kendler D, Scarpa L, di Santo G, Roig LG, Maffey-Steffan J, Horninger W, Virgolini IJ. ⁶⁸Ga-PSMA-11 PET/CT in primary staging of prostate cancer: PSA and Gleason score predict the intensity of tracer accumulation in the primary tumour. *Eur J Nucl Med Mol Imaging.* 2017 Jun;44(6):941-949.
21. Scarpa L, Buxbaum S, Kendler D, Fink K, Bektic J, Gruber L, Decristoforo C, Uprimny C, Lukas P, Horninger W, Virgolini I. The ⁶⁸Ga/¹⁷⁷Lu theragnostic concept in PSMA targeting of castration-resistant prostate cancer: correlation of SUV_{max} values and absorbed dose estimates. *Eur J Nucl Med Mol Imaging.* 2017 May;44(5):788-800.
22. Joensuu T, Joensuu G, Kairemo K, Kiljunen T, Riener M, Aaltonen A, Ala-Opas M, Kangasmäki A, Alanko T, Taipale L, Hervonen P, Bützow A, Virgolini I, Hemminki A. Multimodal Primary Treatment of Metastatic Prostate Cancer with Androgen Deprivation and Radiation. *Anticancer Res.* 2016 Dec;36(12):6439-6447.
23. Uprimny C, Kroiss AS, Decristoforo C, Fritz J, Warwitz B, Scarpa L, Roig LG, Kendler D, von Guggenberg E, Bektic J, Horninger W, Virgolini IJ. Early dynamic imaging in ⁶⁸Ga- PSMA-11 PET/CT allows discrimination of urinary bladder activity and prostate cancer lesions. *Eur J Nucl Med Mol Imaging.* 2017 May;44(5):765-775.

Reviews

1. Virgolini I, Decristoforo C, Haug A, Fanti S, Uprimny C. Current status of theranostics in prostate cancer. *Eur J Nucl Med Mol Imaging.* 2018 Mar;45(3):471-495.
2. Von Eyben F, Roviello G, Kiljunen T, Uprimny C, Virgolini I, Kairemo K, Joensuu T. Third-line treatment and ¹⁷⁷Lu-PSMA radioligand therapy of metastatic castration-resistant prostate cancer: a systematic review. Accepted for publication *Eur J Nucl Med Mol Imaging.* 22.11.2017

Case Reports

1. Loth FL, Meraner V, Holzner B, Singer S, Virgolini I, Gamper EM. Following patient pathways to psycho-oncological treatment: identification of treatment needs by clinical staff and electronic screening. *Psychooncology.* 2018 Feb 20. doi: 10.1002/pon.4675. [Epub ahead of print]
2. Eyben FE, Kiljunen T, Joensuu T, Kairemo K, Uprimny C, Virgolini I. ¹⁷⁷Lu-PSMA-617 radioligand therapy for a patient with lymph node metastatic prostate cancer. *von Oncotarget.* 2017 Aug 8(39):66112-66116.

3. Gamper EM, Nerich V, Sztankay M, Martini C, Giesinger JM, Scarpa L, Buxbaum S, Jeller M, Holzner B, Virgolini I. Evaluation of Noncompletion Bias and Long-Term Adherence in a 10-Year Patient-Reported Outcome Monitoring Program in Clinical Routine. *Value Health*. 2017 Apr;20(4):610-617.

Buchbeiträge

1. Bektic J., Horninger W., Virgolini I. Prostatakarzinom. *Pharmainformation* 2017.
2. Research Report Medizinische Universität Innsbruck 2016-2017.

Abstracts

- 1.
2. Rodrigues M, Nilica B, Waitz D, Stevanovic V, Uprimny C, Kendler D, Buxbaum S, Geraldo L, Warwitz B, Henninger B, Virgolini I. ^{68}Ga -DOTA-TOC and ^{18}F -FDG-PET/CT in the Follow-up of NET Patients Treated with First Full PRRT. 14th Annual ENETS Conference for the Diagnosis and Treatment of Neuroendocrine Tumor Disease. March 8th -10th 2017, Barcelona, Spain.
3. Scarpa L, Di Santo G, Rodrigues-Radischat M, Genovese S, Toscano W, Cova MA, Dore F, Virgolini IJ. Contribution of scintigraphy with radiolabeled leukocytes in bone infections: comparison with CT and MRI. Gemeinsame Jahrestagung der DGN, OGNMB und SGNM 2017. April, 26th -29th 2017, Dresden, Germany.
4. Kroiss AS, Uprimny C, Gruber L, Virgolini IJ. Differentiation of physiological and pathological uptake in histological confirmed neuroendocrine tumors of the pancreas using. Gemeinsame Jahrestagung der DGN, OGNMB und SGNM 2017. April, 26th - 29th 2017, Dresden, Germany.
5. Kroiss AS, Uprimny C, Gruber L, Virgolini IJ. Staging of metastatic extra-adrenal paragangliomas with ^{68}Ga -DOTA-TOC and ^{18}F -DOPA PET/CT. Gemeinsame Jahrestagung der DGN, OGNMB und SGNM 2017. April, 26th -29th 2017, Dresden, Germany.
6. Rodrigues M, Thorstensen E, Uprimny C, Kendler D, Virgolini IJ, Warwitz B. SUVmax, SUVmean and tumor volume results with ^{177}Lu -DOTA-TATE SPECT/CT and ^{68}Ga -DOTA-TOC PET/CT: direct comparison in neuroendocrine tumor patients. Gemeinsame Jahrestagung der DGN, OGNMB und SGNM 2017. April, 26th -29th 2017, Dresden, Germany.
7. Konijnenberg M, Erba PA, Mikolajczak R, Decristoforo C, Maecke H, Maina-Nock T, Zaletel K, Kolenc-Peitzl P, Virgolini I, Przybylik-Mazurek E, Rangger C, Trofimiuk-Muldner M, Skorkiewicz K, Leżaić L, Scarpa L, Di Santo G, Sowa-Staszczak A, de Jong M, Froberg L, Garnuszek P, Pawlak D, Göbel D, Nock B, Bergant D, Hubalewska-Dydejczyk A; Erasmus MC. First biosafety, biodistribution and dosimetry

study of the gastrin analogue ^{111}In -CP04 in medullary thyroid cancer. Phase I clinical trial, GRANT-T-MTC. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.

8. Gruber L, Uprimny C, Orlandi F, Margreiter H, Mariani MF, Jaschke W, Decristoforo C, Virgolini IJ. ^{68}Ga NeoBOMB1 in oligometastatic GIST: first results from a Phase-I/IIa study. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
9. Uprimny C, Kroiss AS, Fritz J, Decristoforo C, vonGuggenberg E, Nilica B, Bektic J, Horninger W, Virgolini IJ. Additional value of early ^{68}Ga -PSMA-11 PET Imaging in the assessment of local recurrence in prostate cancer patients with biochemical recurrence. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
10. Mair C, Warwitz B, Buxbaum S, Virgolini IJ. Patient release after ^{177}Lu DOTATATE and ^{177}Lu PSMA617 therapies. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
11. Kroiss AS, Uprimny C, Gruber L, Shulkin BL, Virgolini IJ. ^{68}Ga -DOTA-TOC PET/CT predicts exact tumor staging in head and neck paragangliomas, compared to ^{18}F -DOPA PET/CT and ^{123}I -MIBG SPECT/CT. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
12. Lobeek D, Terry SYA, Franssen GM, Ma MT, Wester H, Decristoforo C, Oyen WJG, Boerman OC, Rijpkema M. A direct comparison of four different ^{68}Ga -labeled RGD peptides for PET/CT imaging of angiogenesis. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
13. Socan A, Peitl PK, Kroselj M, Petrik M, Decristoforo C. Synthesis Of ^{64}Cu Radiopharmaceuticals For Cell Radiolabelling Using Anion Exchange Column And Labelling Of WBCs. Annual Congress of the European Association of Nuclear Medicine (EANM). October 21st-25th, 2017, Vienna, Austria.
14. Lobeek D, Terry S, Franssen G, Rijpkema M, Ma M, Wester H, Decristoforo C, Oyen W, Boerman O. Direct comparison of DOTA-E-[c(RGDfK)]₂-, TRAP-, fusarinine-C-, and THP-conjugated ^{68}Ga -labeled RGD peptides to image $\alpha\beta 3$ integrins on tumor neovasculature. Society Nuclear Medicine and Molecular Imaging (SNMMI) 2017 Annual Meeting. June 10th-14th, 2017, Denver, Colorado.