

## Publications 2013

### Ph.D. Theses

- [1] Abdoli, M. Development and evaluation of metal artifact reduction and image segmentation techniques in PET/CT. Ph.D. Thesis, University of Groningen. Promotores: Zaidi H, **Dierckx RAJO**, **Pruim J**. October 2, 2013.
- [2] Erba, P.A. Imaging Cardio-vascular Infection. Ph.D. Thesis, University of Groningen. Promotores: **Signore A**, Mariani G, **Dierckx RAJO**. November 25, 2013.
- [3] Golestani, R. New targets in cardiovascular imaging. Ph.D. Thesis, University of Groningen. Promotores: **Dierckx RAJO**, Zeebregts CJAM. May 22, 2013.
- [4] Grippaudo, F.R. Imaging in dermal fillers. Ph.D. Thesis, University of Groningen. Promotores: **Signore A**, Scuderi N. May 13, 2013.
- [5] Jorna, F.H. Diagnostic tools and risk identification in management of hyperparathyroidism. Ph.D. Thesis, University of Groningen. Promotores: Plukker JTM, Stegeman CA. [*In this thesis, SPECT was used as an imaging modality*] March 20, 2013.
- [6] Maccioni, F. Evaluation of Crohn's disease activity: an integrated imaging approach. Promotores: **Signore A**, **Dierckx RAJO**. May 13, 2013.
- [7] Terwisscha van Scheltinga, A. Molecular imaging of tumor characteristics to support targeted cancer therapies. A preclinical focus on HER2, HER3, c-Met, IGF-1R and VEGF-A imaging. Ph.D. Thesis, University of Groningen. Promotores: de Vries EGE, Kosterink JGW. [*This thesis applied microPET for small animal imaging*]. May 13, 2013.
- [8] Teune, L.K. Glucose metabolic patterns in neurodegenerative brain diseases. Ph.D. Thesis, University of Groningen. Promotores: Leenders KL, **Dierckx RAJO**. May 8, 2013.
- [9] Wu, C. Ultra-high-resolution quantitative multi-pinhole small-animal SPECT. Ph.D. Thesis, University of Groningen. Promotores: Beekman FJ, **Dierckx RAJO**. September 11, 2013.

## Full papers in peer-reviewed international journals

- [1] **Abdoli, M.; Dierckx, R.A.;** Zaidi, H. Contourlet-based active contour model for PET image segmentation. *Med. Phys.*, **2013**, 40, 082507
- [2] Akkerman, O.W.; van Altena, R.; Klinkenberg, T.; **Brouwers, A.H.;** Bongaerts, A.H.; van der Werf, T.S.; Alffenaar, J.W. Drug concentration in lung tissue in multidrug-resistant tuberculosis. *Eur. Respir. J.*, **2013**, 42, 1750-1752
- [3] Ananias, H.J.; **Yu, Z.;** Hoving, H.D.; Rosati, S.; **Dierckx, R.A.;** Wang, F.; Yan, Y.; Chen, X.; **Pruim, J.;** **Lub-de Hooge, M.N.;** Helfrich, W.; **Elsinga, P.H.;** de Jong, I.J. Application of Technetium-HYNIC(tricine/TPPTS)-Aca-Bombesin(7-14) SPECT/CT in prostate cancer patients: A first-in-man study. *Nucl. Med. Biol.*, **2013**, 40, 933-938
- [4] Arjaans, M.; Oude Munnink, T.H.; Oosting, S.F.; Terwisscha van Scheltinga, A.G.; Gietema, J.A.; Garbacik, E.T.; Timmer-Bosscha, H.; **Lub-de Hooge, M.N.;** Schröder, C.P.; de Vries, E.G. Bevacizumab-induced normalization of blood vessels in tumors hampers antibody uptake. *Cancer Res.*, **2013**, 73, 3347-3355
- [5] Benadiba, M.; **Luurtsema, G.;** Tumas, V.; Buchpigel, C.A.; Busatto, G.F. New Perspectives in Nuclear Neurology for the Evaluation of Parkinson's Disease. *J Parkinsons. Dis.*, **2013**, 3, 301-323
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- [7] Bollineni, V.R.; Kerner, G.S.; **Pruim, J.;** Steenbakkens, R.J.; Wiegman, E.M.; Koole, M.J.; de Groot, E.H.; **Willemsen, A.T.;** **Luurtsema, G.;** Widder, J.; Groen, H.J.; Langendijk, J.A. PET imaging of tumor hypoxia using 18F-fluoroazomycin arabinoside in stage III-IV non-small cell lung cancer patients. *J Nucl. Med.*, **2013**, 54, 1175-1180
- [8] Buijs, R.V.; Willems, T.P.; Tio, R.A.; Boersma, H.H.; Tielliu, I.F.; **Slart, R.H.;** Zeebregts, C.J. Current state of experimental imaging modalities for risk assessment of abdominal aortic aneurysm. *J Vasc. Surg.*, **2013**, 57, 851-859
- [9] Buijs, R.V.; Willems, T.P.; Tio, R.A.; Boersma, H.H.; Tielliu, I.F.; **Slart, R.H.;** Zeebregts, C.J. Calcification as a risk factor for rupture of abdominal aortic aneurysm. *Eur. J Vasc. Endovasc. Surg.*, **2013**, 46, 542-548
- [10] **Carlucci, G.;** Ananias, H.J.; Yu, Z.; Hoving, H.D.; Helfrich, W.; **Dierckx, R.A.;** Liu, S.; de Jong, I.; **Elsinga, P.H.** Preclinical evaluation of a novel (111)In-labeled bombesin homodimer for improved imaging of GRPR-positive prostate cancer. *Mol. Pharm.*, **2013**, 10, 1716-1724
- [11] de Groot, E.H.; Post, N.; Boellaard, R.; Wagenaar, N.R.; **Willemsen, A.T.;** van Dalen, J.A. Optimized dose regimen for whole-body FDG-PET imaging. *EJNMMI. Res.*, **2013**, 3, 63

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- [16] Giroud, S.; Frare, C.; Strijkstra, A.; Boerema, A.; Arnold, W.; Ruf, T. Membrane phospholipid fatty acid composition regulates cardiac SERCA activity in a hibernator, the Syrian hamster (*Mesocricetus auratus*). *PLoS One*, **2013**, 8, e63111
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- [19] **Glaudemans, A.W.**; **de Vries, E.F.**; Vermeulen, L.E.; **Slart, R.H.**; **Dierckx, R.A.**; **Signore, A.** A large retrospective single-centre study to define the best image acquisition protocols and interpretation criteria for white blood cell scintigraphy with Tc-HMPAO-labelled leucocytes in musculoskeletal infections. *Eur. J Nucl. Med. Mol. Imaging*, **2013**, 40, 1760-1769
- [20] **Glaudemans, A.W.**; Enting, R.H.; Heesters, M.A.; **Dierckx, R.A.**; **van Rheenen, R.W.**; Walenkamp, A.M.; **Slart, R.H.** Value of 11C-methionine PET in imaging brain tumours and metastases. *Eur. J Nucl. Med. Mol. Imaging*, **2013**, 40, 615-635
- [21] **Glaudemans, A.W.**; **de Vries, E.F.**; Galli, F.; **Dierckx, R.A.**; **Slart, R.H.**; **Signore, A.** The Use of F-FDG-PET/CT for Diagnosis and Treatment Monitoring of Inflammatory and Infectious Diseases. *Clin. Dev. Immunol.*, **2013**, 2013, 623036
- [22] **Golestani, R.**; Zeebregts, C.J.; Terwisscha van Scheltinga, A.G.; **Lub-de Hooge, M.N.**; van Dam, G.M.; **Glaudemans, A.W.**; **Dierckx, R.A.**; Tio, R.A.; Suurmeijer, A.J.; **Boersma, H.H.**; Nagengast, W.B.; **Slart, R.H.** Feasibility of vascular endothelial growth factor imaging in human atherosclerotic plaque using (89)Zr-bevacizumab positron emission tomography. *Mol. Imaging*, **2013**, 12, 235-243

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- [26] **Huynh, H.K.; Willemsen, A.T.**; Holstege, G. Female orgasm but not male ejaculation activates the pituitary. A PET-neuro-imaging study. *Neuroimage.*, **2013**, 76C, 178-182
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- [31] **Khanapur, S.; van Waarde, A.**; Ishiwata, K.; Leenders, K.L.; **Dierckx, R.A.; Elsinga, P.H.** Adenosine A2A receptor Antagonists as Positron Emission Tomography (PET) Tracers. *Curr. Med. Chem.*, **2013**, 21, 312-328
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