

Publications Title and Name

Scientific papers

1. Philippe C., Ungersboeck J., Schirmer E., Zdravkovic M., Nics L., Zeilinger M., Shanab K., Lanzenberger R., Karanikas G., Spreitzer H., Viernstein H., Mitterhauser M., Wadsak W. (2012): [¹⁸F]FE@SNAP - a new PET tracer for the melanin concentrating hormone receptor 1 (MCHR1): microfluidic and vessel-based approaches. *Bioorg Med Chem.*, (in press)
2. Hahn A., Wadsak W., Windischberger C., Baldinger P., Höflich A., Losak J., Nics L., Philippe C., Kranz G., Kraus C., Mitterhauser M., Karanikas G., Kasper S., Lanzenberger R. (2012): Differential modulation of the default mode network via serotonin-1A receptors. *Proc Natl Acad Sci U S A.*, 109(7): 2619-24.
3. Neubauer O., Reichhold S., Nics L., Hoelzl C., Valentini J., Stadlmayr B., Knasmüller S., Wagner KH. (2010): Antioxidant responses to an acute ultra-endurance exercise: impact on DNA stability and indications for an increased need for nutritive antioxidants in the early recovery phase. *Br J Nutr.*, 104(8): 1129-38.
4. Nics L., Haeusler D., Wadsak W., Wagner KH., Dudczak R., Kletter K., Mitterhauser M. (2010): The stability of methyl-, ethyl- and fluoroethylesters against carboxylesterases in vitro: there is no difference. *Nucl Med Biol.*, 38(1): 13-7.
5. Wagner KH., Reichhold S., Holzl C., Knasmüller S., Nics L., Meisel M., Neubauer O. (2010): Well-trained, healthy triathletes experience no adverse health risks regarding oxidative stress and DNA damage by participating in an ultra-endurance event. *Toxicology.*, 278(2): 211-6.
6. Haeusler D., Mitterhauser M., Mien L.K., Shanab K., Lanzenberger R., Schirmer E., Ungersboeck J., Nics L., Spreitzer H., Viernstein H., Dudczak R., Kletter K., Wadsak W. (2009): Radiosynthesis of a novel potential adenosine A3 receptor ligand, 5-ethyl 2,4- diethyl-3-((2-[¹⁸F]fluoroethyl)sulfanylcarbonyl)-6-phenylpyridine-5-carboxylate ([¹⁸F]FE@SUPPY:2). *Radiochim Acta.*, 97: 753-58.
7. Haeusler D., Nics L., Ungersboeck J., Mien LK., Lanzenberger R., Shanab K., Sindelar KM., Viernstein H., Wagner KH., Dudczak R., Kletter K., Wadsak W., Mitterhauser M. (2010): [¹⁸F]FE@SUPPY and [¹⁸F]FE@SUPPY:2 - metabolic considerations. *Nucl Med Biol.*, 37(4): 421-6. (the authors Haeusler and Nics contributed equally).
8. Mitterhauser M., Haeusler D., Mien LK., Ungersboeck J., Nics L., Lanzenberger R., Sindelar K., Viernstein H., Dudczak R., Kletter K., Spreitzer H., Wadsak W. (2009): Automatisation and first evaluation of [¹⁸F]FE@SUPPY:2, an alternative PET-Tracer for the Adenosine A3 Receptor: A Comparison with [¹⁸F]FE@SUPPY. *The Open Nuclear Medicine Journal.*, 1: 15-23.
9. Haeusler D., Mien LK., Nics L., Ungersboeck J., Phillippe C., Lanzenberger R., Kletter K., Dudczak R., Mitterhauser M., Wadsak W. (2009): Simple and rapid preparation of [¹¹C]DASB with high quality and reliability for routine applications. *Appl Radiat Isot.*, 67(9): 1654-60.
10. Neubauer O., König D., Kern N., Nics L., Wagner KH. (2008): No indications of persistent oxidative stress in response to an ironman triathlon. *Med Sci Sports Exerc.*, Dec, 40(12): 2119-28.

11. König D., Neubauer O., Nics L., Kern N., Berg A., Bisse E., Wagner KH. (2007): Biomarkers of exercise-induced myocardial stress in relation to inflammatory and oxidative stress. *Exerc Immunol Rev.*, 13: 15-36.
12. Hahn A., Nics L., Baldinger P., Ungersboeck J., Dolliner P., Frey R., Birkfellner W., Mitterhauser M., Wadsak W., Karanikas G., Kasper S., Lanzenberger R. (2012): Combining image-derived and venous input functions enables quantification of serotonin-1A receptors with [carbonyl-¹¹C]WAY-100635 independent of arterial sampling. *Neuroimage.*, 62(1): 199–206 (the authors Hahn and Nics contributed equally).
13. Philippe C., Ungersboeck J., Schirmer E., Zdravkovic M., Nics L., Zeilinger M., Shanab K., Lanzenberger R., Karanikas G., Spreitzer H., Viernstein H., Mitterhauser M., Wadsak W. (2012): [¹⁸F]FE@SNAP - a new PET tracer for the melanin concentrating hormone receptor 1 (MCHR1): microfluidic and vessel-based approaches. *Bioorg Med Chem.*, (in press)
14. Nics L., Hahn A., Zeilinger M., Vranka C., Ungersboeck J., Haeusler D., Hartmann S., Wagner KH., Dudczak R., Lanzenberger R., Wadsak W., Mitterhauser M. (2012): Quantification of the radio-metabolites of the serotonin-1A receptor radioligand [carbonyl-¹¹C]WAY-100635 in human plasma: An HPLC-assay which enables measurement of two patients in parallel. *Appl Radiat Isot.*, (submitted)
15. Hahn A., Nics L., Baldinger P., Wadsak W., Savli M., Kraus C., Birkfellner W., Ungersboeck J., Haeusler D., Mitterhauser M., Karanikas G., Kasper S., Frey R., Lanzenberger R. (2012): Clinical application of image-derived and venous input functions in major depression using [carbonyl-¹¹C]WAY-100635. *J Cereb Blood Flow Metab.*, (submitted)
16. Ungersboeck J., Mark C., Haeusler D., Nics L., Philippe C., Mitterhauser M., Willeit M., Lanzenberger R., Karanikas G., Wadsak W. (2012): Reliable set-up for in-loop ¹¹C-carboxylations using Grignard reactions for the preparation of [carbonyl-¹¹C]WAY-100635 and [¹¹C]-(+)-PHNO. *Appl Radiat Isot.*, (submitted)
17. Nics L., Vranka C., Hendl M., Hartmann S., Wagner K-H., Shanab K., Spreitzer H., Lanzenberger R., Wadsak W., Mitterhauser M. (2012): Different in-vitro models for the determination of metabolic stability of [¹⁸F]FE@SUPPY: species differences and enzyme presentation. (in progress)

Invited lectures (oral)

1. Nics L. (2011): Metabolitenanalysen als Grundlage für quantitative PET
Winterseminar Biologische Psychiatrie – Oberlech, Austria
2. Nics L. (2012): Imaging Biomarker für das dopaminerge System – Biochemische Aspekte
Winterseminar Biologische Psychiatrie – Oberlech, Austria

Congress presentations (oral)

1. Nics L., Hartmann S., Haeusler D., Wadsak W., Wagner KH., Kletter K., Dudczak R., Mitterhauser M. (2009): Stabilität der Adenosin A3 Rezeptor Antagonisten [¹⁸F]FE@SUPPY /

[¹⁸F]FE@SUPPY:2 gegenüber humanen Lebermikrosomen. 18. Jahrestagung der Arbeitsgemeinschaft Radiochemie / Radiopharmazie der DGN, Bad Boll, Germany

2. Nics L., Hartmann S., Hahn A., Haeusler D., Ungersboeck J., Mien L-K., Wadsak W., Lanzenberger R., Wagner KH., Dudczak R., Kletter K., Mitterhauser M. (2010): Quantification of radioactive metabolites in human plasma from the 5-HT_{1A} receptor radioligand [carbonyl-¹¹C]WAY-100635: An improved HPLC-assay. Annual congress of the European Association of Nuclear Medicine (EANM), Vienna, Austria
3. Nics L., Vraka C., Shanab K., Spreitzer H., Wagner KH., Wadsak W., Mitterhauser M. (2011): Stabilität und logP der Adenosin A₃ Antagonisten FEMe@SUPPY, FEMe@SUPPY:2 und (FE)²@SUPPY in-vitro. 19. Arbeitsgemeinschaft Radiochemie / Radiopharmazie der DGN, Ochsenfurt, Germany
4. Nics L., Vraka C., Haeusler D., Wagner KH., Shanab K., Spreitzer H., Dudczak R., Wadsak W., Mitterhauser M. (2011): Some new FE@SUPPY- derivatives with very high stability against Carboxylesterase: A new generation of putative PET-tracers for the Adenosine A₃-receptor? Annual congress of the European Association of Nuclear Medicine (EANM), Birmingham, GB

Congress presentations (poster)

1. Nics L., Haeusler D., El-Samahi H., Wadsak W., Mien L-K., Ungersboeck J., Wagner K.H., Dudczak R., Kletter K., Mitterhauser M. (2009): FE@SUPPY und FE@SUPPY:2: metabolische Überlegungen. 7. Jahrestagung der Österreichischen Gesellschaft für Nuklearmedizin (OGN), Salzburg, Österreich.
2. Nics L., Haeusler D., Mien L-K., Wadsak W., Ettliger D., El-Samahi H., Wagner K.H., Dudczak R., Kletter K., Mitterhauser M. (2009): On the stability of radiolabelled esters: A Carboxylesterase assay. 22nd Annual Congress of the European Association of Nuclear Medicine (EANM), Barcelona, Spain.
3. Nics L., Haeusler D., Mien L-K., Wadsak W., Wagner KH., Kletter K., Dudczak R., Mitterhauser M. (2010): Stability comparison between fluoroethyl- and methyl-esters in vitro. 29th International Symposium „Radioactive Isotopes in Clinical Medicine and Research“; Bad Hofgastein, Austria
4. Nics L., Hartmann S., Zeilinger M., Hahn A., Ungersboeck J., Wadsak W., Lanzenberger R., Wagner KH., Dudczak R., Mitterhauser M. (2011): Quantifizierung der radioaktiven Metaboliten des 5-HT_{1A}-Rezeptor-Antagonisten [carbonyl-¹¹C]WAY-100635 im humanen Plasma durch einen verbesserten HPLC-Assay Gemeinsame Jahrestagung der Deutschen, Österreichischen und Schweizerischen Gesellschaften für Nuklearmedizin, Bregenz, Austria
5. Nics L., Vraka C., Hendl M., Haeusler D., Wagner KH., Shanab K., Spreitzer H., Dudczak R., Wadsak W., Mitterhauser M. (2012): In-vitro stability of [¹⁸F]FE@SUPPY and [¹⁸F]FE@SUPPY:2 against human liver-microsomes and human Plasma 30th International Symposium „Radioactive Isotopes in Clinical Medicine and Research“; Bad Hofgastein, Austria