CURRICULUM VITAE

Surname:	VANDERHEYDEN
First name:	Patrick, Maria, Luc
Place and date of birth:	Hasselt, Belgium, 12th October 1958
Nationality:	Belgian
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Marital state:	Married with 1 child

CERTIFICATES

Degree of Biologist obtained at the RijksUniversiteit Gent in September 1980 with 'Distinction'

Master in Science and Molecular Biology at the Vrije Universiteit Brussel in June 1981 with 'Great Distinction'

Doctor in Science, "Distinction between M1- and M2- Muscarinic acetylcholine receptors", Vrije Universiteit Brussel, 1987 with 'Greatest Distinction'

CAREER

Former positions:

- 'Assistant Associé' at the Department d'Allergopharmacologie, (Université Louis Pasteur, Strasbourg, F) in 1988.
- 'Chercheur Associé' from C.N.R.S. at the Department de Neuroendocrinologie, (Université Louis Pasteur, Strasbourg, F) from 1988 to 1990.
- 'Research Scientist' at the CNS Department, Organon nv, Oss (NL) from 1990 to 1995.
- IUAP Post-doctoral Fellowship at the Department of Molecular and Biochemical Pharmacology, Vrije Universiteit Brussel from 1995-2001

Actual postion and tasks:

- Research Fellowship in the framework of the "Vrije Universiteit Brussel Research Contingent" from 2001
- Coordinator of the Research Group on Experimental Pharmacology (EPHAR) at the Vrije Universiteit Brussel
- Lecturer of the course "Molecular Pharmacology" (3rd year Bio Engineer in Cell and Gene Biotechnology, Medical Biotechnology) at the Vrije Universiteit Brussel
- Coordination and organisation of the practicals related to the courses "Molecular Pharmacology" and "Regulation of cellular processes" for students of Applied Biological Sciences, at the Vrije Universiteit Brussel
- Member of the presidency of the Institute for Molecular Biology and Biotechnology, Vrije Universiteit Brussel
- Secretary of the Educational committee of the Department of Applied Biological Sciences, Vrije Universiteit Brussel
- Promotor of graduate and Ph.D. thesis students

CURRENT RESEARCH INTERESTS AND EXPERTISE

Characterisation of receptors / enzymes involved in the renin-angiotensin system

Biochemical and molecular pharmacology of G-protein coupled receptors

Development and validation of screening tests

Development of functional assays for G-protein coupled receptors in cultured cells

Expression and characterization of recombinant native and mutated receptors in cell lines

RECENT SCIENTIFIC CONGRESSES

Invited speaker

- ➔symposium on Future Trends in Phytochemistry, 10-13 mei, 1998, Rolduc, Nederland
- ➔UNIDO training course: Screening Technologies for Industrial Exploitation of Medicinal and Aromatic Plants, 30 november - 5 december 1998, Panama City
- ➔International Forum on Candesartan cilexetil: From Concept to Clinic, 9-10 april 1999, Praag, Tjechië
- ➔Hypertension Investigators Meeting, 14-17 januari 2000, Amelia Island, Florida, USA

Selected to participate

- ➔Gordon Research Conference on Angiotensin, 11-16 march 2001, Ventura, California, USA
- ➔Gordon Research Conference on Angiotensin, 5-10 may 2002, Il Ciocco, Italy
- ➔Gordon Research Conference on Angiotensin, 29 february -5 march 2004, Ventura, California, USA
- ➔Gordon Research Conference on Angiotensin, 10-15 septembre 2006, Aussois, France

PUBLICATIONS IN INTERNATIONAL JOURNALS

Before 1986

Andre, C., De Backer, J. P., Guillet, J. C., Vanderheyden, P.M.L., Vauquelin, G., and Strosberg, A. D. Purification of muscarinic acetylcholine receptors by affinity chromatography. EMBO J 2:,499-504. 1983. (impactfactor 13.999)

Andre, C., Guillet, J. G., De Backer, J. P., Vanderheyden, P.M.L., Hoebeke, J., and Strosberg, A. D. Monoclonal antibodies against the native or denatured forms of muscarinic acetylcholine receptors. EMBO J 3:17-21. 1984. (impactfactor 13.999)

Vanderheyden, P.M.L., Andre, C., de Backer, J. P., and Vauquelin, G. Agonist mediated conformational changes of solubilized calf forebrain muscarinic acetylcholine receptors. Biochem Pharmacol 33:2981-7.1984. (impactfactor 2.975)

1986

Vanderheyden, P.M.L., Ebinger, G., Kanarek, L., and Vauquelin, G. Epinephrine and norepinephrine stimulation of adenylate cyclase in bovine retina homogenate: evidence for interaction with the dopamine D1 receptor. Life Sci 38:1221-7. 1986. (impactfactor 1.808)

Vanderheyden, P.M.L., Kanarek, L., and Vauquelin, G. Molecular distinction between calf heart and brain muscarine receptors: different N-ethylmaleimide modulation of agonist binding. Eur J Pharmacol 125:127-34. 1986. (impactfactor 2.236)

Vanderheyden, P.M.L., Ebinger, G., De Backer, J. P., and Vauquelin, G. Identification of M2 muscarinic receptors in membranes from bovine cerebral basal arteries. Life Sci 39(17), 1517-23. 1986. (impactfactor 1.808)

1987

Vanderheyden, P.M.L., Ebinger, G., Dierckx, R., and Vauquelin, G. Muscarinic cholinergic receptor subtypes in normal human brain and Alzheimer's presenile dementia. J Neurol Sci 82(1-3), 257-69. 1987. (impactfactor 1.678)

Vanderheyden, P.M.L., Ebinger, G., and Vauquelin, G. Different agonist binding properties of M1 and M2 muscarinic receptors in calf brain cortex membranes. Biochem Pharmacol 36(23), 4119-24. 1987. (impactfactor 2.975)

1988

Vanderheyden, P.M.L., Ebinger, G., and Vauquelin, G. Characterization of M1- and M2-muscarinic receptors in calf retina membranes. Vision Res 28(2), 247-50. 1988. (impactfactor 2.000)

De Keyser, J., Ebinger, G., De Backer, J. P., Convents, A., Vanderheyden, P.M.L., and Vauquelin, G. Subtypes of adrenergic and dopaminergic receptors in bovine cerebral blood vessels. Neurosci Lett 85(2), 272-6. 1988. (impactfactor 2.091)

De Keyser, J., Dierckx, R., Vanderheyden, P.M.L., Ebinger, G., and Vauquelin, G. D1 dopamine receptors in human putamen, frontal cortex and calf retina: differences in guanine nucleotide regulation of agonist binding and adenylate cyclase stimulation. Brain Res 443(1-2), 77-84. 1988. (impactfactor 2.526)

1989

Ebinger, G., Herregodts, P., Michotte, Y., Vanderheyden, P.M.L., and Vauqelin, G. Alzheimer's disease: biological diagnosis. Acta Neurol Belg 89(3-4), 132-4. 1989. (impactfactor 0.697)

Gies, J.P., Bertrand, C., Vanderheyden, P.M.L., Waeldele, F., Dumont, P., Pauli, G., and Landry, Y. Characterization of muscarinic receptors in human, guinea pig and rat lung. J Pharmacol Exp Ther 250(1), 309-15. 1989. (impactfactor 3.452)

1990

Hamann, M., Desarmenien, M., Vanderheyden, P.M.L., Piguet, P., and Feltz, P. Electrophysiological study of tert-butylbicyclophosphorothionate-induced block of spontaneous chloride channels. Mol Pharmacol 37(4), 578-82. 1990. (impactfactor 5.678)

Vanderheyden, P.M.L., Gies, J.P., Ebinger, G., De Keyser, J., Landry, Y., and Vauquelin, G. Human M1-, M2- and M3-muscarinic cholinergic receptors: binding characteristics of agonists and antagonists. J Neurol Sci 97(1), 67-80. 1990. (impactfactor 1.678)

Vauquelin, G., Vanderheyden, P.M.L., and Ebinger, G. Dual effect of N-ethylmaleimide on agonist binding to bovine heart muscarinic receptors. Arch Int Pharmacodyn Ther 307, 5-10. 1990. (impactfactor 1.265)

1992

Peeters, B. W. and Vanderheyden, P.M.L. In vitro and in vivo characterization of the NMDA receptor-linked strychnine-insensitive glycine site. Epilepsy Res 12(2), 157-62. 1992. (impactfactor 2.866)

1993

Peeters, B. W. and Vanderheyden, P.M.L. Modulation of the NMDA receptor by the strychnine-insensitive glycine site. Neuropsychopharmacology 9,PS152. 1993. (impactfactor 4.579)

De Boer, T., Stam, N.J., van Huizen, F. and Vanderheyden, P.M.L. Pharmacological characterization of cloned human 5-HT1A, 5-HT1C and 5-HT2 receptors in 3T3 cells. Journal of Neurochemistry 61, PS90. 1993. (impactfactor 4.900)

1994

Kooyman, A.R., Zwart, R., Vanderheyden, P.M.L., van Hooft, J.A. and Vijverberg, H.P.M. Functional interaction between enantiomers of mianserin and ORG 3770 at 5-HT3 receptors in cultured mouse neuroblastoma cells. Neuropharmacology 33, 501-507, 1994, (impactfactor 4.125)

Kooyman, A.R., van Hooft, J.A., Vanderheyden, P.M.L., and Vijverberg, H.P.M. Competitive and non-competitive effects of 5-hydroxyindole on 5-HT3 receptors in N1E-115 neuroblastoma cells. Br. J. Pharmacol. 112,541-546, 1994, (impactfactor 3.689)

Stam, N. J., Vanderheyden, P.M.L., van Alebeek, C., Klomp, J., de Boer, T., van Delft, A. M., and Olijve, W. Genomic organisation and functional expression of the gene encoding the human serotonin 5-HT2C receptor. Eur J Pharmacol 269(3), 339-48. 1994. (impactfactor 2.236)

Peeters, B. W., van der Heijden, R., Gubbels, D.G., and Vanderheyden, P.M.L. Effects of chronic antidepressant treatment on the hypothalamic-pituitary-adrenal axis of Wistar rats. Ann N Y Acad Sci 746, 449-52. 1994. (no impactfactor)

1995

Konings, P. N., Shahid, M., van Alebeek, C., Makkink, W. K., Stam, N. J., Ruigt, G. S., and Vanderheyden, P.M.L. Combined in situ hybridisation, northern blot analysis, and receptor binding studies in clones expressing different levels of the human 5-HT1A receptor. J Recept Signal Transduct Res 15(1-4), 443-55. 1995. (impactfactor 1.915)

Reijmers, L. G., Vanderheyden, P.M.L., and Peeters, B. W. Changes in prepulse inhibition after local administration of NMDA receptor ligands in the core region of the rat nucleus accumbens. Eur J Pharmacol 272(2-3), 131-8. 1995. (impactfactor 2.236)

1996

Sleight, A. J., Stam, N. J., Mutel, V., and Vanderheyden, P.M.L. Radiolabelling of the human 5-HT2A receptor with an agonist, a partial agonist and an antagonist: effects on apparent agonist affinities. Biochem Pharmacol 51(1), 71-6. 1996. (impactfactor 2.975)

Czerwiec, E., De Backer, J. P., Vauquelin, G., and Vanderheyden, P.M.L. High-affinity binding of [3H]neuropeptide Y to a polypeptide from the venom of Conus anemone. Eur J Pharmacol 315(3), 355-62. 1996. (impactfactor 2.236)

Czerwiec, E., de Backer, J. P., Vauquelin, G., and Vanderheyden, P.M.L. Neuropeptide Y receptors from calf brain: effect of crude Conus venom preparations on [3H]NPY binding. Neurochem Int 29(6), 669-76. 1996. (impactfactor 2.662)

1997

Van Den Beukel, I., Dijcks, F. A., Vanderheyden, P.M.L., Vauquelin, G., and Oortgiesen, M. Differential muscarinic receptor binding of acetylcholinesterase inhibitors in rat brain, human brain and Chinese hamster ovary cells expressing human receptors. J Pharmacol Exp Ther 281(3), 1113-9. 1997. (impactfactor 3.452)

Vanderheyden, P.M.L., Van Liefde, I., De Backer, J. P., and Vauquelin, G. Non-competitive binding of the nonpeptide antagonist BIBP3226 to rat forebrain neuropeptide Y1 receptors. Eur J Pharmacol 331(2-3), 275-84. 1997. (impactfactor 2.236)

1998

Diallo B., Vanderheyden P.M.L., De Backer J.-P. and Vauquelin G. (1998) The venom of Conus Pennaceus inhibits the [3H]-Neuropeptide Y- receptor binding by direct interaction with the radioligand. Neurochem. Int. 32, 39-46. (impactfactor 2.662)

Van Liefde I., Vanderheyden P.M.L., Fraeyman N., De Backer J.-P. and Vauquelin G. (1998) Human Neuropeptide Y Y1 receptors elicit unequal control on the extracellular acidification rate in different cell lines. Eur. J. Pharmacol. 346, 87-95. (impactfactor 2.236)

Vanderheyden P.M.L., Van Liefde I., De Backer J.-P., Ebinger G. and Vauquelin G. (1998) Effect of BIBP3226 on inositol phosphate accumulation and cytosolic calcium levels in wild type NPY Y1 receptor expressing CHO-K1 cell. Regulatory Peptides 75-76, 191-199. (impactfactor 2.634)

Vanderheyden P.M.L., Van Liefde I., De Backer J.-P., Ebinger G. and Vauquelin G. (1998) [3H]-BIBP3226 and [3H]-NPY binding to intact SK-N-MC cells expressing the human Y1 receptor. J. Receptor Signal Transduction Res. 18, 363-385. (impactfactor 1.915)

1999

Vauquelin G., Fierens F.L.P., De Backer J.-P. and Vanderheyden, P.M.L.(1999) The effects of candesartan on human AT1A receptor- expressing Chinese Hamster Ovary cells, J. Am. Soc. Nephrol. 10, S15-S17. (impactfactor 5.745)

Vanderheyden P.M.L., Fierens F.L.P., De Backer J.-P., Frayman N. and Vauquelin G. (1999) Distinction between surmountable and insurmountable selective AT1 receptor antagonists by use of CHO-K1 cells expressing human angiotensin II AT1 receptors. Brit. J. Pharmacol. 126, 1057-1065. (impactfactor 3.689)

Fierens F.L.P., Vanderheyden P.M.L., De Backer J.-P. and Vauquelin G. (1999) Binding of the antagonist [3H]candesartan to angiotensin II AT1 receptor- transfected Chinese hamster ovary cells Eur. J. Pharmacol. 367, 413-422. (impactfactor 2.236)

Fierens F.L.P., Vanderheyden P.M.L., De Backer J.-P. and Vauquelin G. (1999) Insurmountable angiotensin II AT1 receptor antagonists: the role of tight antagonist binding. Eur. J. Pharmacol. 372, 199-206. (impactfactor 2.236)

Le Minh T., Vanden Broeck J., Vanderheyden P.M.L., De Backer J.-P. and Vauquelin G. (1999) High affinity displacement of 3H-NPY binding to the crude venom of Conus anemone by insect neuropeptides. Biochem. Biophys. Res. Commun. 262, 180-186. (impactfactor 3.055)

2000

Vanderheyden P.M.L., Fierens F.L.P., De Backer J.-P. and Vauquelin G. (2000) Reversible and syntopic interaction between angiotensin II AT1 receptor antagonists and human AT1 receptors expressed in CHO-K1 cells. Biochem. Pharmacol. 59, 927-935. (impactfactor 2.975)

Vanderheyden P.M.L., Fierens F.L.P., Verheijen I, De Backer J.-P. and Vauquelin G (2000) Binding characteristics of [3H]-irbesartan to human recombinant angiotensin II type 1 receptors. J. Renin- Angiotensin- Aldosterone System.1, 159-165. (new journal)

Vauquelin G., Fierens F.L.P. and Vanderheyden, P.M.L.(2000) Mechanisms of Angiotensin II Antagonism. Competitive vs. Non-Competitive Inhibition in Angiotensin II Receptor Antagonists (M. Epstein and H.R. Brunner, Eds.) pp 105-118, Harley & Belfus Inc. Philadelphia (book chapter)

Fierens F.L.P., Vanderheyden P.M.L., Gaborik Z., Le Minh T., DeBacker J.P., Hunyady L., Ijzerman A. and Vauquelin G. (2000) Lys199 Mutation of the human angiotensin II AT1 receptor differently affects the binding of surmountable and insurmountable non-peptide antagonists. J. Renin Angiotensin Aldosterone Syst. 1, 283-288. (new journal)

Fraeyman, N., Van de Velde E., Van Ermen, A., Bazan, A., Vanderheyden P.M.L., Van Emmelo, J. and Vandekerckhove J., Effect of maturation and aging on β-adrenergic signal transduction in rat kidney and liver. Biochem. Pharmacol., 60, 1787-1795, 2000. (impactfactor 2.975)

Vanderheyden P.M.L., Verheijen I, Fierens F.L.P., De Backer J.-P. and Vauquelin G (2000) Inhibition of angiotensin II induced inositol phosphate production in CHO cells expressing human AT1 receptors by triacid nonpeptide antagonists. Pharmaceutical Research. 17, 1482-1488. (impactfactor 2.475)

2001

Vanderheyden P.M.L., Fierens F.L.P. and Vauquelin G (2000) Angiotensin II type 1 receptor antagonists: How to explain why some of them produce insurmountable inhibition? Biochem. Pharmacol. 60, 1557-1563. (impactfactor 2.975)

Vauquelin G., Morsing P., Fierens F.L.P., De Backer J.P. and Vanderheyden, P.M.L.(2001) A two-state receptor model for the interaction between angiotensin II AT1 receptors and their non-peptide antagonists. Biochem. Pharmacol. 61, 277-284. (impactfactor 2.975)

Verheijen I., Fierens F.L.P., De Backer J.-P., Vauquelin G. and Vanderheyden, P.M.L.(2001) Interaction between the partially insurmountable antagonist valsartan and human recombinant angiotensin II type 1 receptors. Fund. Clin. Pharmacol.14, 577-585. (impactfactor 1.170)

Vauquelin G, Fierens F.L.P., Verheijen I. and Vanderheyden, P.M.L.(2001) Distinctions between non-peptide angiotensin II AT1 receptor antagonists. J. Renin- Angiotensin- Aldosterone System 2, S24-S31. (new journal)

Vauquelin G, Fierens F.L.P., Gáborik Z., Le Minh T, De Backer J.-P., Hunyady L. and Vanderheyden, P.M.L.(2001) Role of basic amino acids of the human angiotensin type1 receptor in the binding of the non-peptide antagonist candesartan. J. Renin- Angiotensin- Aldosterone System 2, S32-S36. (new journal)

Fierens F.L.P., Vanderheyden P.M.L., De Backer J.-P., Thekkumkara T.J. and Vauquelin G. (2001) Tight binding of the insurmountable antagonist [3H]candesartan to angiotensin II AT1 receptors in intact cells is apparently unrelated to receptor internalization. Biochem. Pharmacol. 61, 1227-1235. (impactfactor 2.975)

Vauquelin G., Fierens F., Verheyen I. and Vanderheyden P.M.L. (2001) Insurmountable AT1 receptor antagonism: the need for different antagonist binding states of the receptor, Trends in Pharmacol. Sciences 22, 343-344. (impactfactor 11.394)

Van Liefde I., Vanderheyden P.M.L., De Backer J.-P., Ebinger G. and Vauquelin G. (2001) Effects of BIBP3226 and BIBP3435 on cytosolic calcium in Neuropeptide Y Y1 receptor- transfected Chinese Hamster ovary cells and wild-type CHO-K1 cells. J. Receptor Signal Transduction Res. 21,11-23. (impactfactor 1.915)

Vauquelin G., Fierens F., Verheyen I. and Vanderheyden P.M.L. (2001) Insurmountable AT1 receptor antagonism: fitting models with experimental data, Trends in Pharmacol. Sciences 22, 557. (impactfactor 11.394)

Caballero-George C., Vanderheyden P.M.L., Solis P.N., Pieters L., Shahat A.A., Gupta M.P., Vauquelin G., Vlietinck A.J. (2001) Biological screening of selected medicinal Panamanian plants by radioligand-binding techniques, Phytomedicine 8:59-70. (impactfactor 0.779)

2002

Le Minh T., Vanderheyden P.M.L., Fierens F.L.P. and Vauquelin G. (2002) Molecular weight of the high-affinity [^{3}H]-NeuropeptideY-binding component from the venom of Conus anemone, Analytical Pharmacology, 2:79-84. (impactfactor no)

Le Minh T., Vanderheyden P.M.L., Baggerman G., Vanden broeck J. and Vauquelin G. (2002) Formation of angiotensin-(1-7) from angiotensin II by the venom of Conus Geographus, Regulatory Peptides, 105:101-108. (impactfactor 2.634)

Caballero-George, C., Vanderheyden P.M.L., De Bruyne T., Shahat, A.A., Van den Heuvel H., Solis, P.N., Gupta, M.P., Claeys M., Pieters, L., Vauquelin, G. and Vlietinck, A.J. (2002) *In vitro* inhibition of 3H-angiotensin II binding on the human AT1 receptor by proanthocyandins from *Guazuma ulmifolia* Bark, Planta Med. 68:1066-1071. (impactfactor 2.085)

Caballero-George, C., Vanderheyden P.M.L., Apers, S., Van den Heuvel H., Solis, P.N., Gupta, M.P., Claeys M., Pieters, L., Vauquelin, G. and Vlietinck, A.J. (2002) Inhibitory activity on binding of specific ligands to the human angiotensin II AT(1) and endothelin 1 ET(A) receptors: bioactive benzo[c]phenanthridine alkaloids from the root of *Bocconia frutescens*. Planta Med. 68:770-775. (impactfactor 2.085)

Vanderheyden P.M.L., Verheijen I., Fierens F.L.P. and Vauquelin G. (2002) The in vitro binding properties of non-peptide AT1 receptor antagonists, Journal of Clinical and Basic Cardiology 5:75-81. (no impactfactor)

Fierens, F.L.P., Vanderheyden P.M.L., Roggeman C., Vande Gucht P., De Backer J.P. and Vauquelin G. (2002) Distinct binding properties of the AT1 receptor antagonist [^{3}H]-candesartan to intact cells and membrane preparations, Biochemical Pharmacology, 7151:1-7. (impactfactor 2.975)

Verheijen I, Vanderheyden P.M.L., De Backer JP, Bottari S and Vauquelin G. (2002) Antagonist interaction with endogenous AT(1) receptors in human cell lines, Biochem. Pharmacol. 64:1207-1214. (impactfactor 2.975)

Le Minh T., Vanderheyden P.M.L., Szaszák M., Hunyady L., Vauquelin G. (2002) Angiotensin IV is a potent agonist for constitutive active human AT1 receptors: distinct roles of the N- and C-terminal residues of angiotensin II during AT1 receptor activation, J. Biol. Chem., 277:23107-23110 (impactfactor 7.258).

Vauquelin, G., Michotte, Y., Smolders, I., Sarre, S., Ebinger, G., Dupont, A. and Vanderheyden, P.M.L. (2002) Cellular targets for angiotensin II fragments: pharmacological and molecular evidence, J. Renin- Angiotensin- Aldosterone System 3:195-204 (new journal).

Vauquelin G, Van Liefde I, and Vanderheyden P.M.L., (2002) New insights in insurmountable antagonism. Fundamental and Clinical Pharmacology. 16(4):263-272. (impact factor 1.170)

Vauquelin G, Van Liefde I, and Vanderheyden P.M.L. (2002) Models and methods for studying insurmountable antagonism. Trends in Pharmacol. Sciences 23(11):514-518. (impactfactor 11.394).

2003

Caballero-George C., Vanderheyden P.M.L., Solis P.N., Gupta M.P., Pieters L., Vauquelin G. and Vlietinck A. (2003) In vitro effect of sanguinarine alkaloid on binding of [^{3}H]candesartan to the human angiotensin AT(1) receptor, Eur J Pharmacol 458:257-262. (impactfactor 2.236)

Hunyady, L., Vauquelin, G. and Vanderheyden, P.M.L. (2003) Agonist induction and conformational selection during activation of G-protein-coupled receptor, Trends in Pharmacol. Sciences 24:81-86. (impactfactor 11.394)

Le Minh T., Vanderheyden, P.M.L., Szaszak, M., Hunyady, L., Kersemans, V. and Vauquelin, G. (2003) Peptide and nonpeptide antagonist interaction with constitutively active human AT1 receptors, Biochem. Pharmacol. 65:1329-1338 (impactfactor 2.447)

Le Minh T., Vanderheyden P.M.L., Fierens F. and Vauquelin G. (2003) Molecular characterization of the high-affinity [3H]neuropeptide Y-binding component from the venom of Conus anemone. Fundam Clin Pharmacol. 17(4):457-462 (impactfactor 1.170)

Verheijen I., De Backer J.P., Vanderheyden P.M.L., Vauquelin G., (2003) A two-state model of antagonist-AT1 receptor interaction: further support by binding studies at low temperature. Biochem Pharmacol. 65(8):1339-1341. (impactfactor 2.447)

2004

Verheijen I., Tourlousse D., Vanderheyden P.M.L., Backer J.P., Vauquelin G. (2004) Effect of saponin and filipin on antagonist binding to AT 1 receptors in intact cells. Biochem Pharmacol. 67(8):1601-1606 (impactfactor 2.447)

Demaegdt H., Vanderheyden P.M.L., De Backer J.P., Mosselmans S., Laeremans H., Le Minh T., Kersemans V., Michotte Y., Vauquelin G. (2004) Endogenous cystinyl aminopeptidase in Chinese hamster ovary cells: characterization by [125I]Ang IV binding and catalytic activity. Biochem Pharmacol. 68(5):885-892 (impactfactor 2.447)

Demaegdt H., Laeremans H., De Backer J.P., Mosselmans S., Le Minh T., Kersemans V., Michotte Y., Vauquelin G., Vanderheyden P.M.L. (2004) Synergistic modulation of cystinyl aminopeptidase by divalent cation chelators. Biochem. Pharmacol. 68(5):893-900 (impactfactor 2.447)

Stragier B., Sarre S., Vanderheyden P.M.L., Vauquelin G., Fournie-Zaluski M.C., Ebinger G., Michotte Y. (2004) Metabolism of angiotensin II is required for its in vivo effect on dopamine release in the striatum of the rat. J. Neurochem. 90(5): 1251-1257 (impact factor 4.852)

Verheijen I., Vanderheyden P.M.L., De Backer J.P., Vauquelin G. (2004) AT1 receptor antagonists. Curr. Med. Chem. Cardiovasc. Hematol. Agents 2(1):69-77 (new journal)

Caballero-George C., Vanderheyden P.M.L., Okamoto Y., Masaki T., Mbwambo Z., Apers S., Gupta M.P., Pieters L., Vauquelin G., Vlietinck A. (2004) Evaluation of bioactive saponins and triterpenoidal aglycons for their binding properties on human endothelin ETA and angiotensin AT1 receptors. Phytotherapy Res. 18(9):729-736 (impact factor 1.192).

Peeters B.W., Tonnaer J.A., Groen M.B., Broekkamp C.L., van der Voort H.A., Schoonen W.G., Smets R.J., Vanderheyden P.M.L., Gebhard R., Ruigt G.S. (2004) Glucocorticoid receptor antagonists: new tools to investigate disorders characterized by cortisol hypersecretion. Stress 7(4):233-241 (impact factor 2.967).

2005

Kostenis E., Milligan G., Christopoulos A., Sanchez-Ferrer C.F., Heringer-Walther S., Sexton P.M., Gembardt F., Kellett E., Martini L., Vanderheyden P.M.L., Schultheiss H.P., Walther T. (2005) G-protein-coupled receptor Mas is a physiological antagonist of the angiotensin II type 1 receptor. Circulation. 111(14):1806-1813 (impact factor 8.822).

Esteban V., Ruperez M., Sanchez-Lopez E., Rodriguez-Vita J., Lorenzo O., Demaegdt H., Vanderheyden P.M.L., Egido J., Ruiz-Ortega M. (2005) Angiotensin IV activates the nuclear transcription factor-kappaB and related proinflammatory genes in vascular smooth muscle cells. Circulation Research 96(9): 965-973 (impact factor 8.002).

Le Minh T., De Backer J.P., Hunyady L., Vanderheyden P.M.L., Vauquelin G. (2005) Ligand binding and functional properties of human angiotensin AT1 receptors in transiently and stably expressed CHO-K1 cells. Eur. J. Pharmacol. 513(1-2): 35-45 (impact factor 2.637).

Laeremans H., Demaegdt H., De Backer J.P., Le Minh T., Kersemans V., Michotte Y., Vauquelin G., Vanderheyden P.M.L. (2005) Metal ion modulation of cystinyl aminopeptidase. Biochem J. 390: 351-357 (impact factor 4.159).

2006

Demaegdt H., Lenaerts P.J., Swales J., De Backer J.P., Laeremans H., Le Minh T., Kersemans K., Vogel L.K., Michotte Y., Vanderheyden P.M.L., Vauquelin G. (2006) Angiotensin AT(4) receptor ligand interaction with cystinyl aminopeptidase and aminopeptidase N: 125I-Angiotensin IV only binds to the cystinyl aminopeptidase apo-enzyme. Eur. J. Pharmacol. 546(1-3): 19-27 (impact factor 2.637).

Vanderheyden P.M.L., Demaegdt H., Swales J., Lenaerts P.J., De Backer J.P., Vogel L.K. and Vauquelin G. (2006) Synergistic inhibition of the enzymatic activity of aminopeptidase N by divalent metal ion chelators, Fundamental and Clinical Pharmacology (impact factor 1.170, in press).

Stragier B, Demaegdt H., De Bundel D., Smolders I., Sarre S., Vauquelin G., Ebinger G., Michotte Y. and Vanderheyden P.M.L. (2007) Involvement of insulin-regulated aminopeptidase and/or aminopeptidase N in the angiotensin IV-induced effect on dopamine release in the striatum of the rat. Brain Research, 1131(1):97-105 (impact factor 2.296).