

# List of publications of Analytical Platform of the Faculty of Pharmacy

## Peer-reviewed journal articles

### 2021

Acheampong, A., Melot, C., Benjelloun, M., Cheval, M., Reye, F., Delporte, C., Van Antwerpen, P., Franck, T., McEntee, K., & Van De Borne, P. (2021). Effects of hyperoxia and cardiovascular risk factors on myocardial ischaemia-reperfusion injury : a randomized, sham-controlled parallel study. *Experimental physiology*, 106, 1249-1262.

Delporte, C., Noret, N., Vanhaverbeke, C., Hardy, O. J., Martin, J.-F., Tremblay-Franco, M., Touboul, D., Gorel, A. P., Faes, M., Stevigny, C., Van Antwerpen, P., & Souard, F. (2021). Does the Phytochemical Diversity of Wild Plants Like the *Erythrophleum* genus Correlate with Geographical Origin? *Molecules (Print Archive Edition)*, 26(6), 1668. doi:10.3390/molecules26061668

Colin, M., Dechêne, L., Ceusters, J., Niesten, A., Demazy, C., Lagneaux, L., Zouaoui Boudjeltia, K., Franck, T., Van Antwerpen, P., Renard, P., Mathieu, V., & Serteyn, D. (2021). Priming of mesenchymal stem cells with a hydrosoluble form of curcumin allows keeping their mesenchymal properties for cell#based therapy development. *Journal of Cellular and Molecular Medicine*. doi:10.1111/jcmm.16403

Pireaux, V., Delporte, C., Rousseau, A., Desmet, J.-M., Van Antwerpen, P., Raes, M., & Zouaoui Boudjeltia, K. (2021). M2 Monocyte Polarization in Dialyzed Patients Is Associated with Increased Levels of M-CSF and Myeloperoxidase-Associated Oxidative Stress: Preliminary Results. *Biomedicines*, 9(1). doi:10.3390/biomedicines9010084

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Rojo Poveda, O., Barbosa-Pereira, L., El Khattabi, C., Youl, E. N. H., Bertolino, M. M., Delporte, C., Pochet, S., & Stevigny, C. (2020). Polyphenolic and Methylxanthine Bioaccessibility of Cocoa Bean Shell Functional Biscuits: Metabolomics Approach and Intestinal Permeability through Caco-2 Cell Models. *Antioxidants*, 9(11), 1164, 21. doi:10.3390/antiox9111164

Soubhye, J., Van Antwerpen, P., & Dufrasne, F. (2020). A patent review of myeloperoxidase inhibitors for treating chronic inflammatory syndromes (focus on cardiovascular diseases, 2013-2019). *Expert opinion on therapeutic patents*. doi:10.1080/13543776.2020.1780210

Derenne, A., Derfoufi, K.-M., Cowper, B., Delporte, C., & Goormaghtigh, E. (2020). FTIR spectroscopy as an analytical tool to compare glycosylation in therapeutic monoclonal antibodies. *Analytica chimica acta*, 1112, 62-71. doi:10.1016/j.aca.2020.03.038

De Carvalho, A., Viaene, J., Vandenbussche, G., De Braekeleer, K., Masereel, B., Wouters, J., Souard, F., Vander Heyden, Y., Van Antwerpen, P., Delporte, C., & Mathieu, V. (2020). A new potential anti#cancer beta#carboline derivative decreases the expression

levels of key proteins involved in glioma aggressiveness: A proteomic investigation. *Drug development research*, 8(1), 32-42. doi:10.1002/ddr.21600

**2019**

De Becker, B., Coremans, C., Chaumont, M., Delporte, C., Van Antwerpen, P., Franck, T., Rousseau, A., Zouaoui Boudjeltia, K., Cullus, P., & Van De Borne, P. (2019). Severe Hypouricemia Impairs Endothelium-Dependent Vasodilatation and Reduces Blood Pressure in Healthy Young Men: A Randomized, Placebo-Controlled, and Crossover Study. *Journal of the American Heart Association*, 8(23), e013130. doi:10.1161/JAHA.119.013130

Colin, M., Delporte, C., Janky, R., Lechon, A.-S., Renard, G. G., Van Antwerpen, P., Maltese, W., & Mathieu, V. (2019). Dysregulation of Macropinocytosis Processes in Glioblastomas May Be Exploited to Increase Intracellular Anti-Cancer Drug Levels: The Example of Temozolomide. *Cancers (Basel)*, 11(3), 411.

Cortese, M., Delporte, C., Dufour, D., Noyon, C., Chaumont, M., De Becker, B., Reye, F., Rousseau, A., Eker, O. F., Neve, J., Piagnerelli, M., Zouaoui Boudjeltia, K., Robaye, B., & Van Antwerpen, P. (2019). Validation of a LC/MSMS method for simultaneous quantification of 9 nucleotides in biological matrices. *Talanta*, 193, 206-214. doi:10.1016/j.talanta.2018.10.003

Chaa, S., Boufadi, Y. M., Keddari, S., Benchaib, A. H., Soubhye, J., Van Antwerpen, P., & Riazi, A. (2019). Chemical composition of propolis extract and its effects on epirubicin-induced hepatotoxicity in rats. *Revista brasileira de farmacognosia*. doi:10.1016/j.bjp.2019.01.005

Franck, T., Aldib, I., Zouaoui Boudjeltia, K., Furtmüller, P. G., Obinger, C., Neven, P., Prévost, M., Soubhye, J., Van Antwerpen, P., Mouithys-Mickalad, A., & Serteyn, D. (2019). The soluble curcumin derivative NDS27 inhibits superoxide anion production by neutrophils and acts as substrate and reversible inhibitor of myeloperoxidase. *Chemico-biological interactions*, 297, 34-43. doi:10.1016/j.cbi.2018.10.008

**2018**

Khalil, A., Poelvoorde, P., Fayyad-Kazan, M., Rousseau, A., Nuyens, V., Uzureau, S., Biston, P., El-Makhour, Y., Badran, B., Van Antwerpen, P., Zouaoui Boudjeltia, K., & Vanhamme, L. (2018). Apolipoprotein L3 interferes with endothelial tube formation via regulation of ERK1/2, FAK and Akt signaling pathway. *Atherosclerosis*, 279, 73-87. doi:10.1016/j.atherosclerosis.2018.10.023

Rodríguez-Gómez, R., Vanheuverzwijn, J., Souard, F., Delporte, C., Stevigny, C., Stoffelen, P., De Braekeleer, K., & Kauffmann, J.-M. (2018). Determination of three main chlorogenic acids in water extracts of coffee leaves by liquid chromatography coupled to an electrochemical detector. *Antioxidants*, 7(10), 143. doi:10.3390/antiox7100143

Khalil, A., Medfai, H., Poelvoorde, P., Fayyad Kazan, M., Delporte, C., Van Antwerpen, P., EL-Makhour, Y., Biston, P., Delrée, P., Badran, B., Vanhamme, L., & Zouaoui Boudjeltia, K. (2018). Myeloperoxidase promotes tube formation, triggers ERK1/2 and Akt pathways and is expressed endogenously in endothelial cells. *Archives of biochemistry and biophysics*, 654, 55-69. doi:10.1016/j.abb.2018.07.011

Roumequere, T., Van Antwerpen, P., Vanhamme, L., Delporte, C., Rousseau, A., Wespes, E., Vanhaeverbeek, M., & Zouaoui Boudjeltia, K. (2018). Myeloperoxidase et Volume Prostatique: étude préliminaire. *Progrès en urologie*, 28(10), 482-487. doi:10.1016/j.purol.2018.06.004

Vandeput, M., Rodríguez-Gómez, R., Izere, A.-M., Zafra-Gomez, A., De Braekeleer, K., Delporte, C., Van Antwerpen, P., & Kauffmann, J.-M. (2018). Electrochemical studies of ethoxyquin and its determination in salmon samples by flow injection analysis with an amperometric dual detector. *Electroanalysis*, 30(30), 1293-1302. doi:10.1002/elan.201700611

Vanhamme, L., Zouaoui Boudjeltia, K., Van Antwerpen, P., & Delporte, C. (2018). The other myeloperoxidase: Emerging functions. *Archives of biochemistry and biophysics*, 649, 1-14. doi:10.1016/j.abb.2018.03.037

Medfai, H., Khalil, A., Rousseau, A., Nuyens, V., Paumann-Page, M., Sevcnikar, B., Furtmüller, P. G., Obinger, C., Moguilevsky, N., Peulen, O., Herfs, M., Castronovo, V., Amri, M., Van Antwerpen, P., Vanhamme, L., & Zouaoui Boudjeltia, K. (2018). Human peroxidasin 1 promotes angiogenesis through ERK1/2, Akt and FAK pathways. *Cardiovascular Research*. doi:10.1093/cvr/cvy179

Dufour, D., Khalil, A., Nuyens, V., Rousseau, A., Delporte, C., Noyon, C., Cortese, M., Reye, F., Pireaux, V., Neve, J., Vanhamme, L., Robaye, B., Lelubre, C., Desmet, J.-M., Raes, M., Zouaoui Boudjeltia, K., & Van Antwerpen, P. (2018). Data on myeloperoxidase-oxidized low-density lipoproteins stimulation of cells to induce release of resolvin-D1. *Data in Brief*, 18, 1160-1171. doi:10.1016/j.dib.2018.03.131

Dufour, D., Khalil, A., Nuyens, V., Rousseau, A., Delporte, C., Noyon, C., Cortese, M., Reye, F., Pireaux, V., Neve, J., Vanhamme, L., Robaye, B., Lelubre, C., Desmet, J.-M., Raes, M., Zouaoui Boudjeltia, K., & Van Antwerpen, P. (2018). Native and myeloperoxidase-oxidized low-density lipoproteins act in synergy to induce release of resolvin-D1 from endothelial cells. *Atherosclerosis*, 272, 108-117. doi:10.1016/j.atherosclerosis.2018.03.012

Souard, F., Delporte, C., Stoffelen, P., Thévenot, E. E., Noret, N., Dauvergne, B., Kauffmann, J.-M., Van Antwerpen, P., & Stevigny, C. (2018). Metabolomics fingerprint of coffee species determined by untargeted-profiling study using LC-HRMS. *Food chemistry*, 245, 603-612. doi:10.1016/j.foodchem.2017.10.022

Delporte, C., Zouaoui Boudjeltia, K., Furtmueller, P. G., Maki, R., Dieu, M., Noyon, C., Soudi, M., Dufour, D., Coremans, C., Nuyens, V., Reye, F., Rousseau, A., Raes, M., Moguilevsky, N., Vanhaeverbeek, M., Ducobu, J., Neve, J., Robaye, B., Vanhamme, L., Reynolds, W., Obinger, C., & Van Antwerpen, P. (2018). Myeloperoxidase-catalyzed oxidation of cyanide to cyanate: A potential carbamylation route involved in the formation of atherosclerotic plaques? *The Journal of biological chemistry*. doi:10.1074/jbc.M117.801076

Rosiere, R., Van Woensel, M., Gelbcke, M., Mathieu, V., Hecq, J., Mathivet, T., Vermeersch, M., Van Antwerpen, P., Amighi, K., & Wauthoz, N. (2018). New Folate-Grafted Chitosan Derivative To Improve Delivery of Paclitaxel-Loaded Solid Lipid

Nanoparticles for Lung Tumor Therapy by Inhalation. *Molecular pharmaceutics*, 15(3), 899-910. doi:10.1021/acs.molpharmaceut.7b00846

Chaumont, M., Bernard, A., Pochet, S., Melot, C., El Khattabi, C., Reye, F., Zouaoui Boudjeltia, K., Van Antwerpen, P., Delporte, C., & Van De Borne, P. (2018). High Wattage E-cigarettes Induce Tissue Hypoxia and Lower Airway Injury: A Randomized Trial. *American journal of respiratory and critical care medicine*. doi:10.1164/rccm.201711-2198LE

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Chaumont, M., De Becker, B., Zaher, W., Culié, A., Deprez, G., Melot, C., Reye, F., Van Antwerpen, P., Delporte, C., Debbas, N., Zouaoui Boudjeltia, K., & Van De Borne, P. (2018). Differential Effects of E-Cigarette on Microvascular Endothelial Function, Arterial Stiffness and Oxidative Stress: A Randomized Crossover Trial. *Scientific reports*, 8(1), 10378. doi:10.1038/s41598-018-28723-0

Kajouj, S., Marcelis, L., Mattiuzzi, A., Grassin, A., Dufour, D., Van Antwerpen, P., Boturny, D., Defrancq, E., Surin, M., De Winter, J., Gerbaux, P., Jabin, I., & Moucheron, C. (2018). Synthesis and photophysical studies of a multivalent photoreactive Rull-calix[4]arene complex bearing RGD-containing cyclopentapeptides. *Beilstein Journal of Organic Chemistry*, 14, 1758-1768. doi:10.3762/bjoc.14.150

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Roumequere, T., Van Antwerpen, P., Fathi, H., Rousseau, A., Vanhamme, L., Franck, T., Costa, C., Morelli, A., Lelubre, C., Hauzeur, C., Raes, M., Serteyn, D., Wespes, E., Vanhaeverbeek, M., & Zouaoui Boudjeltia, K. (2017). Relationship between oxidative stress and erectile function. *Free radical research*, 51(11-12), 924-931. doi:10.1080/10715762.2017.1393074

Boufadi, Y. M., Van Antwerpen, P., Chikh Alard, I., Neve, J., Riazi, A., & Soubhye, J. (2017). Antioxidant effects and bioavailability evaluation of propolis extract and its content of pure polyphenols. *Journal of food biochemistry*, e12434. doi:10.1111/jfbc.12434

Planinc, A., Dejaegher, B., Vander Heyden, Y., Viaene, J., Van Praet, S., Rappez, F., Van Antwerpen, P., & Delporte, C. (2017). Batch-to-batch N-glycosylation Study of Infliximab, Trastuzumab, and Bevacizumab, and Stability Study of Bevacizumab. *European journal of hospital pharmacy*, 24(5), 286-292. doi:10.1136/ejhpharm-2016-001022

Soubhye, J., Chikh Alard, I., Aldib, I., Prévost, M., Gelbcke, M., De Carvalho, A., Furtmüller, P. G., Obinger, C., Flemmig, J., Tadrent, S., Meyer, F., Rousseau, A., Neve, J., Mathieu, V., Zouaoui Boudjeltia, K., Dufrasne, F., & Van Antwerpen, P. (2017). Discovery of Novel Potent Reversible and Irreversible Myeloperoxidase Inhibitors Using Virtual

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Chopard, B., Perez-Morga, D., Courbebaisse, G., Lorenz, E., Hoekstra, A. A., Ribeiro De Sousa, D., Lätt, J., Mountrakis, L., Dubois, F., Yourassowsky, C., Van Antwerpen, P., Eker, O. F., Vanhamme, L., & Zouaoui Boudjeltia, K. (2017). A physical description of the adhesion and aggregation of platelets. *Royal Society open science*, 4(4), 170219. doi:10.1098/rsos.170219

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Planinc, A., Dejaegher, B., Vander Heyden, Y., Viaene, J., Van Praet, S., Rappez, F., Van Antwerpen, P., & Delporte, C. (2017). LC-MS analysis combined with principal component analysis and soft independent modelling by class analogy for a better detection of changes in N-glycosylation profiles of therapeutic glycoproteins. *Analytical and Bioanalytical Chemistry*. doi:10.1007/s00216-016-9683-9

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*Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*, 29(sup2), 18. doi:10.1080/14767058.2016.1234778

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