

List of Publications

A. Research Articles and Reviews

2021

C. Borsari, E. Keles, **A. Treyer**, M. De Pascale, P. Hebeisen, **M. Hamburger**, M. P. Wymann, Second-generation tricyclic pyrimido-pyrrolo-oxazine mTOR inhibitor with predicted blood-brain barrier permeability, *RSC Med. Chem.* (2021). doi: 10.1039/D0MD00408A

S. Santos, L. Zurfluh, M. Menet, **O. Potterat**, U. von Mandach, **M. Hamburger**, A.P. Simões-Wüst, Bryophyllum pinnatum compounds inhibit oxytocin-induced signalling pathways in human myometrial cells, *Frontiers Pharmacol.* **12**, 632986 (2021). doi: 10.3389/fphar.2021.632986

C. Human, **O. Danton**, D. De Beer, T. Maruyama, L. Alexander, C. Malherbe, **M. Hamburger**, E. Joubert, Identification of a novel di-C-glycosyl dihydrochalcone and the thermal stability of polyphenols in model ready-to-drink beverage solutions with Cyclopia subternata extract as functional ingredient, *Food Chemistry* **351**, 129273 (2021). doi: 10.1016/j.foodchem.2021.129273

M. Keller, S. Fankhauser, N. Giezendanner, M. König, **F. Keresztes**, **O. Danton**, **O. Fertig**, L. Marcourt, **M. Hamburger**, V. Butterweck, **O. Potterat**, Saponins from Saffron corms inhibiting the secretion and gene expression of pro-inflammatory cytokines, *J. Nat. Prod.* (2021). doi: 10.1021/acs.jnatprod.0c01220

J.T. Wang, **O. Danton**, **A. Treyer**, **M. Hamburger**, Development of a solid-supported cysteinyl probe for the isolation of electrophiles from plant pollen extracts, *Talanta* **228**, 122216 (2021). doi: 10.1016/j.talanta.2021.122216

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D. Mertenat, M. Dal Cero, C.R. Vogl, S. Ivemeyer, B. Meier, A. Maeschli, **M. Hamburger**, M. Walkenhorst, Ethnoveterinary knowledge of farmers in bilingual regions of Switzerland – is there potential to extend veterinary options to reduce antimicrobial use? *J. Ethnopharmacol.* **246**, 112184 (2020). doi: 10.1016/j.jep.2019.112184

M. Walkenhorst, F. Leiber, A. Maeschli, A. Kapp, A. Spengler-Neff, M. **T. Faleschini**, **E. Garo**, **M. Hamburger**, **O. Potterat**, P. Mayer, S. Graf-Schiller, A. Bieber, A multicomponent herbal feed additive improves health parameters in dairy cows - a two stage, multi center, placebo controlled long term on-farm trial. *J. Anim. Physiol. Anim. Nutr.* **104**, 439-452 (2020). doi: 10.1111/jpn.13297

V. Zabela, C. Sampath, **M. Oufir**, V. Butterweck, **M. Hamburger**, Single dose pharmacokinetics of intravenous 3,4-dihydroxyphenylacetic acid and 3-hydroxyphenylacetic acid in rats, *Fitoterapia* **142**, 104526 (2020). doi: 10.1016/j.fitote.2020.104526

D. Ehrsam, S. Sieber, **M. Oufir**, F. Porta, **M. Hamburger**, J. Huwyler, H. E. Meyer zu Schwabedissen, Design, synthesis and characterization of a paclitaxel formulation activated by extracellular MMP9. *Bioconjugate Chem.* **31**; 781-793 (2020). doi: 10.1021/acs.bioconjchem.9b00865

S. Sharifi, P.G. Mostafavi, R. Tarasi, A.M. Moradi, M.H. Givianrad, M. Moridi Farimani, S.N. Ebrahimi, **M. Hamburger**, H. Niknejad, Purified compounds from marine organism sea pen induce apoptosis in human breast cancer cell MDA-MB-231 and cervical cancer cell HeLa, *Eur. J. Pharmacol.* **877**, 173075 (2020). doi: 10.1016/j.ejphar.2020.173075

A. Bisio, A.M. Schito, F. Pedrelli, **O. Danton**, **J. Reinhardt**, G. Poli, T. Tuccinardi, T. Bürgi, M. Giacomini, D. Calzia, I. Panfoli, G.C. Schito, **M. Hamburger**, N. De Tommasi, Antibacterial and ATP

synthesis modulating compounds from *Salvia tingitana*, *J. Nat. Prod.* **83**, 1027-1042 (2020). doi: 10.1021/acs.jnatprod.9b01024

A.M. Zimmermann-Klemd, J.K. Reinhardt, A. Morath, W. Schamel, R. Huber, **M. Hamburger**, C. Gründemann, Immunosuppressive activity of *Artemisia argyi* extract and isolated compounds, *Front. Pharmacol.* **11**, 402 (2020). doi: 10.3389/fphar.2020.00402

C. Drescher, **M. Keller, O. Potterat, M. Hamburger**, R. Brückner, Structure-elucidating total synthesis of the (polyenoyl) tetramic acid militarinone C, *Org. Lett.* **22**, 2559-2563 (2020). doi: 10.1021/acs.orglett.0c00431

R. Zadali, S.N. Ebrahimi, Z. Tofighi, A. Es-haghi, **M. Hamburger**, M. Kaiser, M. D'Ambola, N. De Tommasi, A. Hadjiakhoondi, Antiprotozoal activity of diterpenoids isolated from *Zhumeria majdae* – absolute configuration by circular dichroism, *DARU J. Pharm. Sci.* **28**, 455-462 (2020), doi: 10.1007/s40199-020-00345-w

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A.B. Mahmoud, O. Danton, M. Kaiser, S.A. Khalid, **M. Hamburger**, P. Mäser, HPLC-based activity profiling for antiprotozoal compounds in *Croton zambesicus* and *Cuscuta hyalina*, *Front. Pharmacol.*, **11**, 1246 (2020), doi: 10.3389/fphar.2020.01246

A.B. Mahmoud, O. Danton, M. Kaiser, Sohee Han, A. Moreno, S.A. Algaffar, S. Khalid, W.K. Oh, **M. Hamburger**, P. Mäser, Lignans, amides, and saponins from the roots of *Haplophyllum tuberculatum* and their antiprotozoal activity, *Molecules* **25**, 2825; (2020). doi: 10.3390/molecules25122825

A. Agapouda, V. Butterweck, **M. Hamburger**, D. De Beer, E. Joubert, A. Eckert, Honeybush extracts (*Cyclopia* spp.) rescue mitochondrial functions and bioenergetics against oxidative injury, *Oxid. Med. Cell. Longevity* 948602 (2020), doi: 10.1155/2020/1948602

A.M. Zimmermann-Klemd, J.K. Reinhardt, T. Nilsu, A. Morath, C. Falanga, W.W. Schamel, R. Huber, **M. Hamburger**, C. Gründemann, *Boswellia carteri* and 3-O-acetyl- α -boswellic acid suppress T cell activation by inhibiting the NFAT signalling pathway, *Fitoterapia* **146**, 104694, (2020), doi 10.1016/j.fitote.2020.104694

J.K. Reinhardt, A.M. Zimmermann-Klemd, O. Danton, M. Smieško, C. Gründemann, **M. Hamburger**, Compounds from *Toddalia asiatica*: Immunosuppressant activity and absolute configurations, *J. Nat. Prod.* **83**, 3012–3020 (2020). doi: 10.1021/acs.jnatprod.0c00564

S.K. Kordkolaei, M.R. Kanani, M. Tabefam, N. N. Sarvestani, **M. Hamburger**, M.M. Farimani, Terpenoids and phenolics of *Micromeria persica*, *Nat. Prod. Res.* **34**, 2913-2918 (2020). doi: 10.1080/14786419.2019.1598988

C. Borsari, E. Keles, D. Rageot, M. De Pascale, **A. Treyer**, T. Bohnacker, A. Melone, R. Sriramaratnam, F. Beaufiglioli, **M. Hamburger**, P. Hebeisen, W. Loescher, D. Fabbro, P. Hillmann, M. Wymann, 4-(difluoromethyl)-5-(4-((3R,5S)-3,5-dimethylmorpholino)-6-((R)-3-methylmorpholino)-1,3,5-triazin-2-yl)pyridin-2-amine (PQR626), a potent, orally available, and brain-penetrant mTOR inhibitor for the treatment of neurological disorders, *J. Med. Chem.* **63**, 13595-13617 (2020). doi: 10.1021/acs.jmedchem.0c00620

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S. Soroury, M. Alilou, T. Gelbrich, M. Tabefam, **O. Danton**, S.N. Ebrahimi, M. Kaiser, **M. Hamburger**, H. Stuppner, M.M. Farimani, Unusual derivatives from *Hypericum scabrum*, *Sci. Rep.* **10**, 22181 (2020). doi: 10.1038/s41598-020-79305-y

N.A. Walters, D. de Beer, A. de Villiers, **O. Danton**, **M. Hamburger**, E. Joubert, Phenolic profiling of *Cyclopia pubescens* (honeybush) using comprehensive off-line CCC×LC-DAD-MS separation and structural elucidation of isolated compounds, *Phytochem. Anal.* 1-15 (2020). doi: 10.1002/pca.2981

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S.M. Tabatabaei, S.N. Ebrahimi, P. Salehi, A. Sonboli, M. Tabefam, M. Kaiser, **M. Hamburger**, M. Moridi Farimani, Antiprotozoal germacranolide sesquiterpene lactones from *Tanacetum sonbolii*. *Planta Med.* **85**, 424-430 (2019). doi: 10.1055/a-0824-1294

K. Stucki, M. Dal Cero, C.R. Vogl, S. Ivenmeyer, B. Meier, A. Maeschli, **M. Hamburger**, M. Walkenhorst, Ethnoveterinary knowledge of farmers in pre-alpine and alpine regions of the Swiss cantons of Bern and Lucerne compared to ancient and recent literature – is there a tradition? *J. Ethnopharmacol.* **234**, 225-244 (2019). doi: 10.1016/j.jep.2018.12.022

N. Syafni, **F. Moradi-Afrapoli**, **O. Danton**, A. Wilhelm, M. Stadler, S. Hering, **O. Potterat**, **M. Hamburger**, HPLC-based activity profiling for GABA_A receptor modulators from *Murraya exotica*. *Nat. Prod. Comm.* **14**, 41-45 (2019).

M.B. Kahnmoeei, M. Tabefam, S.N. Ebrahimi, **O. Danton**, **M. Hamburger**, M.M. Farimani, Chemical constituents from the ethyl acetate extract of *Salvia hydrangea* DC. ex Benth, *Nat. Prod. Comm.* 1-4, (2019). doi: 10.1177/1934578X19848852

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M.T. Faleschini, A. Maier, S. Fankhauser, K. Thasis, S. Hebeisen, **M. Hamburger**, M. Butterweck, Discovery of GABAA receptor modulators of natural origin - Validation of a FLIPR assay for screening and HPLC-based activity profiling. *Planta Med.*, **85**, 925-933 (2019). doi: 10.1055/a-0921-7602

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