

Prof. A. Odermatt – Original PUBLICATIONS (peer reviewed)

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2022

1. Geueke, B., Groh, K. J., Maffini, M. V., Martin, O. V., Boucher, J. M., Chiang, Y-T., Gwosdz, F., Jieh, P., Kassotis, C. D., Lanska, P., Myers, J. P., **Odermatt, A.**, Parkinson, L. V., Schreier, V. N., Srebny, V., Zimmermann, L., Scheringer, M., and Muncke, J. (2022) Most chemicals detected in food contact materials are not listed for use: systematic evidence on migrating and extractable food contact chemicals. Crit Rev Food Sci Nutr, in press.
2. Gathercole, L. L., Nikolaou, N., Harris, S. E., Arvaniti, A., Poolman, T. M., Hazlehurst, J. M., Kratschmar, D. V., Todorovic, M., Moolla, A., Dempster, N., Pink, R. C., Saikali, M. F., Bentley, L., Penning, T. M., Ohlsson, C., Cummins, C. L., Poutanen, M., **Odermatt, A.**, Cox, R. D., and Tomlinson, J. W. (2022) AKR1D1 knockout mice develop a sex dependent metabolic phenotype. J. Endocrinol., 253, 97-113.
3. Inderbilen, S. G., Kley, M., Zogg, M., Sellner, M., Fischer, A., Kędzierski, J., Boudon, S., Jetten, A. M., Smieško, M., and **Odermatt, A.** (2022) Activation of retinoic acid-related orphan receptor $\gamma(t)$ by parabens and benzophenone UV-filters. Toxicology, 471, 153159.
4. Leclercq, G., Alberti Servera, L., Danilin, S., Challier, J., Steinhoff, N., Bossen, C. **Odermatt, A.**, Nicolini, V., Umana, P., Klein, C., Bacac, M., Giusti, A-M., Schneider, A., and Haegel, H. (2022) Dissecting the mechanism of cytokine release induced by T-cell engagers highlights the contribution of neutrophils. Oncoimmunol., 11, e2039432.
5. Weingartner, M., Stücheli, S., Jebbawi, F., Gottstein, B., Beldi, G., Lundström-Stadelmann, B., Wang, J., and **Odermatt, A.** (2022) Albendazole reduces hepatic inflammation and endoplasmic reticulum-stress in a mouse model of chronic *Echinococcus multilocularis* infection. PLoS Negl. Trop. Dis. 16, e0009192.
6. Leclercq, G., Haegel, H., Toso, A., Zimmermann, T., Green, L., Steinhoff, N., Sam, J., Pulko, V., Schneider, A., Giusti, A-M., Challier, J., Freimoser-Grundschober, A., Lariviere, L. **Odermatt, A.**, Stern, M., Umana, P., Bacac, M., and Klein, C. (2022) JAK and mTOR inhibitors prevent cytokine release while retaining T cell bispecific antibody *in vivo* efficacy. J. Immunother. Cancer, 10, e003766.

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7. Vanderriele, P. E., Wang, Q., Méryllat, A.-M., Ino, F., Aeschlimann, G., Ehret, X., Ancin Del Olmo, D., Ponce de Leon, V., Scholl, U., Winter, D. V., **Odermatt, A.**, Hummler, E., and Verouti, S. (2021) Salt-sensitive hypertension in GR^{+/-} rats is accompanied with dysregulation in adrenal soluble epoxide hydrolase and polyunsaturated fatty acids pathways. Int. J. Mol. Sci., 22, 13218.
8. Lemmens, M., Fischer, B., Zogg, M., Rodrigues, L., Kerr, G., DelRio, A., Schaeffer, F., Maddalo, D., Dubost, V., Piaia, A., Mueller, A., Plappert-Helbig, U., Naumann, U., Haegele, J., **Odermatt, A.**, Martus, H-J., and Libertini, S. (2021) Evaluation of two *in vitro* assays for tumorigenicity assessment of CRISPR/Cas9 genome-edited cells. Mol. Ther. Methods Clin. Dev., 23, 241-253.
9. Gomez, C., Jebbawi, F., Weingartner, M., Wang, J., Stücheli, S., Stieger, B., Gottstein, B., Beldi, G., Lundström-Stadelmann, B., and **Odermatt, A.** (2021) Impact on Bile Acid Concentrations by Alveolar Echinococcosis and Treatment with Albendazole in Mice. Metabolites, 11, 442.

10. Leclercq, G., Haegel, H., Schneider, A., Marrer-Berger, E., Boetsch, C., Walz, A., Pulko, V., Sam, J., Challier, J., Ferlini, C., **Odermatt, A.**, Umana, P., Bacac, M., and Klein, C. (2021) The Src/lck inhibitor dasatinib reversibly switches off cytokine release and T cell cytotoxicity following stimulation with T cell bispecific antibodies. J. Immunother. Cancer, 9, e002582.
11. Banki, E., Fisi, V., Moser, S., Wengi, A., Carrel, M., Loffing-Cueni, D., Penton, D., Kratschmar, D. V., Rizzo, L., Lienkamp, S., **Odermatt, A.**, Rinschen, M. M., and Loffing, J. (2021) Specific disruption of calcineurin-signaling in the distal convoluted tubule impacts the transcriptome and proteome, and causes hypomagnesemia and metabolic acidosis. Kidney Int., 100, 850-869.
12. Baier, F. A., Sánchez-Taltavull, D., Yarahmadov, T., Gómez Castellà, C., Jebbawi, F., Keogh, A., Tombolini, R., Odriozola, A., Castro Dias, M., Deutsch, U., Furuse, M., Engelhardt, B., Zuber, B., **Odermatt, A.**, Candinas, D., and Stroka, D. (2021) Loss of claudin-3 impairs hepatic metabolism, biliary barrier function and cell proliferation in the murine liver. Cell. Mol. Gastroenterol. Hepatol., 12, 745-767.
13. Birk, J., Lizak, B., Appenzeller-Herzog, C., **Odermatt, A.** (2021) Monitoring of Changes in the Oxidizing Milieu in the Endoplasmic Reticulum of Mammalian Cells Using HyPerER. Bio Protoc., 11, e4076.
14. Bell, R. M. B., Villalobos, E., Nixon, M., Miguelez-Crespo, A., Murphy, L., Fawkes, A., Coutts, A., Sharp, M. G. F., Koerner, M. V., Allan, E., Meijer, O. C., Houtman, R., **Odermatt, A.**, Beck, K. R., Denham, S. G., Lee, P., Homer, N. Z. M., Walker, B. R., and Morgan, R. A. (2021) Carbonyl reductase 1 amplifies glucocorticoid action in adipose tissue and impairs glucose tolerance in lean mice. Mol. Metab., 48, 101225.
15. Weingartner, M., Stücheli, S., Kratschmar, D. V., Birk, J., Klusonova, P., Chapman, K. E., and **Odermatt, A.** (2021) The ratio of ursodeoxycholytaurine to 7-oxolithocholytaurine serves as a biomarker of decreased 11 β -hydroxysteroid dehydrogenase 1 activity in mouse. Brit. J. Pharmacol., 178:3309–3326.
16. Inderbinen, S. G., Zogg, M., Kley, M., Smiesko, M., and **Odermatt, A.** (2021) Species-specific differences in the inhibition of 11 β -hydroxysteroid dehydrogenase 2 by itraconazole and posaconazole. Toxicol. Appl. Pharmacol., 412, 115387.
17. Schnoz, C., Moser, S., Kratschmar, D. V., **Odermatt, A.**, Loffing-Cueni, D., and Loffing, J. (2021) Deletion of the transcription factor Prox-1 specifically in the renal distal convoluted tubule causes hypomagnesemia via reduced expression of TRPM6 and NCC. Pflugers Arch., 473, 79-93.

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18. Mayr, F., Möller, G., Garscha, U., Fischer, J., Rodriguez Castano, P., Inderbinen, S. G., Temml, V., Waltenberger, B., Schwaiger, S., Hartmann, R. W., Gege, C., Martens, S., **Odermatt, A.**, Pandey, A. V., Werz, O., Adamski, J., Stuppner, H., and Schuster, D. (2020) Finding new molecular targets of familiar natural products using in silico target prediction. Int. J. Mol. Sci., 21, 7102.
19. Thompson, G. R., Surampudi, P. N., and **Odermatt, A.** (2020) Gynecomastia and hypertension in a patient treated with posaconazole. Clin. Case Rep., 8, 3158–3161.
20. Davis, M. R., Nguyen, M. H., Gintjee, T. J., **Odermatt, A.**, Young, B. Y., and Thompson, G. R. (2020) Management of posaconazole-induced pseudohyperaldosteronism. J. Antimicrob. Chemother., 75, 3688-3693.
21. Gomez, C., Stücheli, S., Kratschmar, D. V., Bouitbir, J., and **Odermatt, A.** (2020) Development and validation of a highly sensitive LC-MS/MS method for the analysis of bile acids in serum, plasma and liver tissue samples. Metabolites, 10, E282.

22. Patt, M., Gysi, J., Faresse, N., Cidlowski, J. A., and **Odermatt, A.** (2020) Protein phosphatase 1 alpha enhances glucocorticoid receptor activity by a mechanism involving phosphorylation of serine-211. Mol. Cell. Endocrinol., 518, 110873.
23. Nguyen, M. H., Davis, M. R., Wittenberg, R., Mchardy, I., Baddley, J. W., Young, B. Y., **Odermatt, A.**, Thompson, G. R. (2020) Posaconazole serum drug levels associated with pseudohyperaldosteronism. Clin. Infect. Dis., 70, 2593-2598.
24. Schulze, F., Wehner, J., Kratschmar, D. V., Makshana, V., Meier, D. T., Häuselmann, S. P., Dalmas, E., Thienel, C., Dror, E., Wiedemann, S. J., Traub, S., Nordmann, T. M., Rachid, L., De Baat, A., Rohm, T. V., Zhao, C., **Odermatt, A.**, Böni-Schnetzler, M., and Donath, M. Y. (2020) Inhibition of IL-1beta improves glycaemia in a mouse model for gestational diabetes. Sci. Rep. 10, 3035.
25. Lizak, B., Birk, J., Zana, M., Kosztyi, G., Kratschmar, D. V., **Odermatt, A.**, Zimmermann, R., Geiszt, M., Appenzeller-Herzog, C., and Banhegyi, G. (2020) Ca²⁺ mobilization-dependent reduction of the endoplasmic reticulum lumen is due to influx of cytosolic glutathione. BMC Biol., 18:19.
26. Beck, K. R., Telisman, L., van Koppen, C. J., Thompson, G. R., and **Odermatt, A.** (2020) Molecular mechanisms of posaconazole- and itraconazole-induced pseudohyperaldosteronism and assessment of other systemically used azole antifungals. J. Steroid Biochem. Mol. Biol., 199, 105605.
27. Inderbinen, S. G., Engeli, R. T., Rohrer, S. R., Di Renzo, E., Aengenheister, L., Buerki-Thurnherr, T., and **Odermatt A.** (2020) Tributyltin and triphenyltin induce 11 β -hydroxysteroid dehydrogenase 2 expression and activity through activation of retinoid X receptor α . Toxicol. Lett., 322, 39-49.
28. Patt, M., Beck, K. R., Di Marco, T., Jäger, M-C., Gonzalez-Ruiz, V., Boccard, J., Rudaz, S., Hartmann, R. W., Salah, M., van Koppen, C. J., Grill, M., and **Odermatt, A.** (2020) Profiling of anabolic androgenic steroids and selective androgen receptor modulators for interference with adrenal steroidogenesis. Biochem. Pharmacol., 172, 113781.
29. Tsachaki, M., Strauss, P., Dunkel, A., Navratilova, H., Mladenovic, N., and **Odermatt, A.** (2020) Impact of 17 β -HSD12, the 3-ketoacyl-CoA reductase of long-chain fatty acid synthesis, on breast cancer cell proliferation and migration. Cell. Mol. Life Sci., 77, 1153-1175.
30. Randi, E. B., Benjamin, V., Tsachaki, M., Porto, E., Vermeylen, S., Lindenmeyer, M. T., Thuy Le, T. T., Cohen, C. D., Devuyt, O., Kistler, A., Szabo, C., Kawada, N., Hankeln, T., **Odermatt, A.**, Dewilde, S., Wenger, R. H., and Hoogewijs, D. (2020) The anti-oxidative role of cytoglobin in podocytes: implications for a role in chronic kidney disease. Antioxid. Redox Sign., 32, 1155-1171.

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31. Keppner, A., Maric, D., Sergi, C., Ansermaet, C., De Bellis, D., Kratschmar, D. V., Canonica, J., Klusonova, P., Fenton, R., **Odermatt, A.**, Crambert, G., Hoogewijs, D., and Hummler, E. (2019) Deletion of the serine protease *CAP2/Tmprss4* leads to dysregulated renal water handling upon dietary potassium depletion. Sci. Rep., 9, 19540.
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33. Beck, K. R., Inderbinen, S. G., Kanagaratnam, S., Kratschmar, D. V., Jetten, A. M., Yamaguchi, H., and **Odermatt, A.** (2019) 11 β -hydroxysteroid dehydrogenases control access of 7 β ,27-dihydroxycholesterol to retinoid-related orphan receptor gamma. J. Lipid Res., 60, 1535-1546.

34. Thompson, G. R., Beck, K. R., Patt, M., Kratschmar, D. V., and **Odermatt, A.** (2019) Posaconazole-induced hypertension due to inhibition of 11 β -hydroxylase and 11 β -hydroxysteroid dehydrogenase 2. J. Endocr. Soc., 3, 1361-1366.
35. Trinh, B., Hepprich, M., Betz, M. J., Burkard, T., Cavelti-Weder, C. Seelig, E., Meinenberg, F., Kratschmar, D. V., Beuschlein, F., Reincke, M., **Odermatt, A.**, Hall, M. N., Donath, M. Y., Swierczynska, M. M. (2019) Treatment of primary aldosteronism with mTORC1 inhibitors. J. Clin. Endocr. Metab., 104, 4703-4714.
36. Sandström, J., Kratschmar, D. V., Broyer, A., Poirot, O., Marbet, P., Chantong, B., Zufferey, F., Dos Santos, T., Boccard, J., Chrast, R., **Odermatt, A.**, and Monnet-Tschudi, F. (2019) In vitro models to study insulin and glucocorticoids modulation of Trimethyltin (TMT)-induced neuroinflammation and neurodegeneration, and in vivo validation in db/db mice. Arch. Toxicol., 49, 1649-1664.
37. Akram, M., Patt, M., Kaserer, T., Temml, V., Waratchareeyakul, W., Kratschmar, D. V., Hauptenthal, J., Hartmann, R. W., **Odermatt, A.**, and Schuster, D. (2019) Identification of the fungicide epoxiconazole by virtual screening and biological assessment as inhibitor of human 11 β -hydrolase and aldosterone synthase. J. Steroid. Biochem. Mol. Biol., 192, 105358.
38. Crane, E. A., Heydenreuter, W., Beck, K. R., Strajhar, P., Vomacka, J., Smiesko, M., Mons, E., Barth, L., Neuburger, M., Vedani, A., **Odermatt, A.**, Sieber, S. A., and Gademann, K. (2019) Profiling withanolide A for therapeutic targets in neurodegenerative diseases. Bioorg. Med. Chem., 27, 2508-2520.
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40. Egli, J., Schlothauer, T., Spick, C., Seeber, S., Singer, T., **Odermatt, A.**, and Iglesias, A. (2019) The binding of human IgG to minipig Fc γ Rs – implications for preclinical assessment of therapeutic antibodies. Pharm. Res., 36, 47.
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43. Strajhar, P., Vizeli, P., Patt, M., Dolder, P. C., Kratschmar, D. V., Liechti, M., E., and **Odermatt, A.** (2019) Effects of lisdexamfetamine on plasma steroid concentrations compared with D-amphetamine in healthy subjects: a randomized, double-blind, placebo-controlled study. J. Steroid. Biochem. Mol. Biol., 186, 212-225.

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11 β -hydroxysteroid dehydrogenase 1 dependent glucocorticoid activation in macrophages. FEBS J., 285, 3993-4004.

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47. Lister, A., Bourgeois, S., Imenez Silva, P. H., Rubio-Aliaga, I., Marbet, P., Walsh, J., Shelton, L. M., Keller, B., Verrey, F., Devuyst, O., Giesbertz, P., Daniel, H., Goldring, C. E., Copple, I. M., Wagner, C. A., and **Odermatt, A.** (2018) NRF2 regulates the glutamine transporter Slc38a3 (SNAT3) in kidney in response to metabolic acidosis. Sci. Rep., 8, 5629.
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53. Jimenez-Canino, R., Lorenzo-Diaz, F., **Odermatt, A.**, Bailey, M. A., Livingstone, D. E. W., Jaisser, F., Farman, N., and Alvarez de la Rosa, D. (2017) 11 β -HSD2 SUMOylation modulates cortisol-induced mineralocorticoid receptor nuclear translocation and transactivation. Endocrinology, 158, 4047-4063.
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