List of publications

Kaspar Rufibach, PhD
Biostatistician
`http://www.kasparrufibach.ch`

Last updated: 17th June 2024

Online code repositories and publication lists:

- github

- Publons

- arXiv

- PubMed

- Google Scholar

Text book:

[B1] Held, L., **Rufibach, K.**, Seifert, B. **(2013)**. Medizinische Statistik: Konzepte, Methoden, Anwendungen. *Pearson.* 442p.

Patents:

[P3] Wyss-Coray, T., Rando, T.A., Britschgi, M., **Rufibach, K.**, Villeda, S.A. **(2020)**. Methods of treating cognitive symptoms of an aging-associated impairment by modulating C-C chemokine receptor type 3. Google patents

[P2] Wyss-Coray, T., **Rufibach, K.**, Britschgi, M., Villeda, S.A., Rando, T.A. **(2016)**. CCR3 Modulation in the Treatment of Aging-Associated Impairments, and Compositions for Practicing the Same. Google patents

[P1] Wyss-Coray, T., Rando, T.A., Britschgi, M., **Rufibach, K.**, Villeda, S.A. **(2014)**. Biomarkers of Aging for Detection and Treatment of Disorders. Google patents

Papers under review for statistical journals:

[43] Erdmann, A., Beyersmann, J., **Rufibach, K. (2023)**. Oncology clinical trial design planning based on a multistate model that jointly models progression-free and overall survival endpoints. *Submitted.*

Articles in statistical journals:

[42] **Rufibach, K.**, Beyersmann, J., Friede, T., Schmoor, C., Stegherr, R. **(2024)**. Survival analysis for AdVerse events with VarYing follow-up times (SAVVY): summary of findings and assessment of existing guidelines. *Trials*, **25**, article 353.

[41] **Rufibach, K.**, Wolbers, M., Devenport, J., Yung, G., Harbron, C., Bedding, A., Huang, Z., Lin, R., Pang, H., Sabanés Bové, D., Wang, J. **(2024)**. Implementation of statistical innovation in a pharmaceutical company. *Statistics in Biopharmaceutical Research*, to appear.

[40] Polito, L., Liang, Q., Pal, N., Mpofu, P., Sawas, A., Humblet, O. **Rufibach, K.**, Heinzmann, D. **(2024)**. Applying the Estimand and Target Trial frameworks to external control analyses using observational data: a case study in the solid tumor setting. *Front. Pharmacol.*, **15**:1223858.

[39] **Rufibach, K.**, Grinsted, L., Li, J., Weber, H.-J., Zheng, C. Zhou, J. **(2023)**. Quantification of follow-up time in oncology clinical trials with a time-to-event endpoint: Asking the right questions. *Pharmaceutical Statistics*, **22**(4), 671–691.

[38] **Rufibach*, K.**, Stegherr*, R., Schmoor, C., Jehl, V., Allignol, A., Boeckenhoff, A., Dunger-Baldauf, C., Eisele, L., Künzel, T., Kupas, K., Leverkus, F., Trampisch, M., Zhao, Y., Friede, Beyersmann, J. **(2023)**. Survival analysis for AdVerse events with VarYing follow-up times (SAVVY) – comparison of adverse event risks in randomized controlled trials. *Statistics in Biopharmaceutical Research*, **15**(4), 767–780. *The first two authors contributed equally.*

[37] Ionan, A.C., Paterniti, M., Mehrotra, D., Scott, J., Ratitch, B., Collins, S., Gomatam, S., Nie, L., **Rufibach, K.**, Bretz, F. **(2023)**. Clinical and Statistical Perspectives on the Estimand Framework Implementation. *Statistics in Biopharmaceutical Research*, **15**(3), 554–559.

[36] Rajeshwari, S., Barksdale, E., Marchenko, O., Jiang, Q., Ando, Y., Bloomquist, E., Coory, M., Crouse, M., Degtyarev, E., Framke, T., Freidlin, B., Gerber, D.E., Gwise, T., Josephson, F., Hess, L., Kluetz, P., Li, D., Mandrekar, S., Posch, M., Rantell, K., Ratitch, B., Raven, A., Roes, K., **Rufibach, K.**, Sarac, S.B., Simon, R., Singh, H., Theoret, M., Thomson, A., Zuber, E., Shen, Y.L., Pazdur, R. **(2023)**. Cancer Clinical Trials Beyond Pandemic: Report of an American Statistical Association Biopharmaceutical Section Open Forum Discussion. *Statistics in Biopharmaceutical Research*, **15**(2), 444–449.

[35] Collignon, O., Schiel, A., Burman, C.F., **Rufibach, K.**, Posch, M., Bretz, F. **(2022)**. Estimands and Complex Innovative Designs. *Clinical Pharmacology & Therapeutics*, **112**(6), 1183–1190.

[34] Kunzmann, K, Grayling, M.J., Lee, K.M., Robertson, D.S., **Rufibach, K.**, Wason, J.M.S. **(2022)**. Conditional Power and Friends: The Why and How of (Un)planned, Unblinded Sample Size Recalculations in Confirmatory Trials. *Stat. Med.*, **41**(5), 877–890.

[33] Manitz, J., Kan-Dobrosky, N., Buchner, H., Casadebaig, M.L., Haddad, V., Jie, F., Martin, E., Tang, R., Yung, G., Zhou, J., Stalbovskaya, V., Shentu, Y., **Rufibach, K.**, Mo, M., Dey, J., Degtyarev, E. on behalf of the industry working group "Estimands in oncology" **(2022)**. Estimands for Overall Survival in Clinical Trials with Treatment Switching in Oncology. *Pharmaceutical Statistics*, **21**, 150–162. *Among the most downloaded publications in the first twelve months after publication among papers that appeared in 2021 in this journal.*

[32] Stegherr, R., Schmoor, C., Beyersmann, J., **Rufibach, K.**, Jehl, V., Brückner, A., Eisele, L., Künzel, T., Kupas, K., Langer, F., Loos, A., Norenberg, C., Voss, F., Friede, T. **(2021)**. Survival analysis for AdVerse events with VarYing follow-up times (SAVVY): Estimation of adverse event risks. *Trials*, **22**(1), 420.

[31] Kunzmann, K, Grayling, M.J., Lee, K.M., Robertson, D.S., **Rufibach, K.**, Wason, J.M.S. **(2021)**. A review of Bayesian perspectives on sample size derivation for confirmatory trials. *Am. Stat.*, **75**(4), 424–432.

[30] Bornkamp, B., **Rufibach, K.**, Lin, J., Liu, Y., Mehrotra, D., Roychoudhury, S., Schmidli, H., Shentu, Y., Wolbers, M. on behalf of the industry working group "Estimands in oncology" **(2021)**. Principal Stratum Strategy: Potential Role in Drug Development. *Pharmaceutical Statistics*, **20**, 737–751. *4th most downloaded publication that appeared in 2021 in this journal.*

[29] Sun, S., Weber, J., Butler, E., **Rufibach, K.**, Roychoudhury, S. on behalf of the industry working group "Estimands in oncology" **(2021)**. Estimands in Hematology Trials. *Pharmaceutical Statistics*, **20**, 793–805. *3rd most downloaded publication that appeared in 2021 in this journal.*

[28] Stegherr, R., Beyersmann, J., Jehl, V., **Rufibach, K.**, Leverkus, F., Schmoor, C., Friede, T. on behalf of the SAVVY project group **(2021)**. Survival analysis for AdVerse events with VarYing follow-up times (SAVVY): Rationale and statistical concept of a meta-analytic study. *Biom. J.*, **63**, 650–670.

[27] Lawrence, R., Degtyarev, E., Griffiths, P., Trask, P., Lau, H., D'Alessio, D., Griebsch, I., Wallenstein, G., Cocks, K., **Rufibach, K. (2020)**. What is an estimand and how does it relate to quantifying the effect of treatment on patient-reported quality of life outcomes in clinical trials. *Journal of Patient Reported Outcomes*, 4(1):68.

[26] Degtyarev*, E., **Rufibach*, K.**, Shentu*, Y., Yung*, G., Casey, M., Englert, S., Liu, F., Liu, Y., Sailer, O., Siegel, J., Sun, S., Tang, R., Zhou, J. on behalf of the industry working group "Estimands in oncology" **(2020)**. Assessing the impact of COVID-19 on the objective and analysis of oncology clinical trials – application of the estimand framework. *Statistics in Biopharmaceutical Research*, **12**(4), 427-437.
The first four authors contributed equally.

[25] **Rufibach, K.**, Heinzmann, D., Monnet, A. **(2020)**. Integrating Phase 2 into Phase 3 based on an Intermediate Endpoint While Accounting for a Cure Proportion – with an Application to the Design of a Clinical Trial in Acute Myeloid Leukemia. *Pharmaceutical Statistics*, **19**, 44–58.

[24] Beyer, U., Dejardin, D., Meller, M., **Rufibach, K.**, Burger, H.U. **(2020)**. A multistate model for early decision making in oncology. *Biom. J.*, **62**(3), 550-567.

[23] Meller, M., Beyersmann, J., **Rufibach, K. (2019)**. Joint modelling of progression-free and overall survival and computation of correlation measures. *Stat. Med.*, **38**, 4270-4289.

[22] **Rufibach, K. (2019)**. Treatment Effect Quantification for Time-to-event Endpoints - Estimands, Analysis Strategies, and beyond. *Pharmaceutical Statistics*, **18**, 144-164. *Among top 10% downloaded publications of this journal within 12 months of publication in 2018-2019.*

[21] **Rufibach, K.**, Burger, H.U., Abt, M. **(2016)**. Bayesian Predictive Power: Choice of Prior and some Recommendations for its Use as Probability of Success in Drug Development. *Pharmaceutical Statistics*, **15**, 438–446.

[20] Asikanius, E., **Rufibach, K.**, Bahlo, J., Bieska, G., Burger, H.U. **(2016)**. Comparison of design strategies for a three-arm clinical trial with time-to-event endpoint: power, time-to-analysis, and operational aspects. *Biom. J.*, **58**(6), 1295-1310.

[19] **Rufibach, K.**, Chen M., Ngyuen, H. **(2016)**. Comparison of different clinical development plans for confirmatory subpopulation selection. *Contemp. Clin. Trials*, **47**, 78–84.

[18] **Rufibach, K.**, Jordan, P., Abt, M. **(2016)**. Sequentially Updating the Likelihood of Success of a Phase 3 Pivotal Trial based on Interim Analyses or External Information. *J. Biopharm. Stat.*, **26**(2), 191–201.

[17] Dümbgen, L., **Rufibach, K.**, Schuhmacher, D. **(2014)**. Maximum-Likelihood Estimation of a Log-Concave Density based on Censored Data. *Electron. J. Stat.*, **8**, 1405–1437.

[16] Balabdaoui, F., Jankowski, H., **Rufibach, K.**, Pavlides, M. **(2013)**. Asymptotics of the discrete log-concave maximum likelihood estimator and related applications. *J. R. Stat. Soc. Ser. B Stat. Methodol.*, **75**(4), 769–790.

[15] **Rufibach, K. (2012)**. A smooth ROC curve estimator based on log-concave density estimates. *Int J Biostat.*, **8**(1), 1–29.

[14] **Rufibach, K. (2011)**. Selection models with monotone weight functions in meta analysis. *Biom. J.*, **53**(4), 689–704.

[13] Dümbgen, L., **Rufibach, K. (2011)**. **logcondens**: Computations Related to Univariate Log-Concave Density Estimation. *Journal of Statistical Software*, **39**(6), 1–28.

[12] Held, L., **Rufibach, K.**, Balabdaoui, F. **(2010)**. A score regression approach to assess calibration of continuous probabilistic predictions. *Biometrics*, **66**(4), 1295–1305.

[11] Balabdaoui, F., **Rufibach, K.**, Santambrogio, F. **(2010)**. Least Squares estimation of two ordered monotone regression curves. *J. Nonparametr. Stat.*, **22**(8), 1019–1037.

[10] **Rufibach, K.**, Walther, G. **(2010)**. The block criterion for multiscale inference about a density, with applications to other multiscale problems. *J. Comput. Graph. Statist.*, 19(1), 175–190.

[9] **Rufibach, K. (2010)**. An Active Set Algorithm to Estimate Parameters in Generalized Linear Models with Ordered Predictors. *Comput. Statist. Data Anal.*, **54**, 1442–1456.

[8] **Rufibach, K. (2009)**. **reporttools**: R Functions to Generate LaTeX Tables of Descriptive Statistics. *Journal of Statistical Software*, Code Snippets, **31**(1), 1–7.

[7] Müller, S., **Rufibach, K. (2009)**. Smooth tail index estimation. *J. Stat. Comput. Simul.*, **79**(9), 1155–1167.

[6] Balabdaoui, F., **Rufibach, K.**, Wellner, J. A. **(2009)**. Limit distribution theory for maximum likelihood estimation of a log-concave density. *Ann. Statist.*, **37**(3), 1299–1331.

[5] Dümbgen, L., **Rufibach, K. (2009)**. Maximum likelihood estimation of a log-concave density and its distribution function: basic properties and uniform consistency. *Bernoulli*, **15**(1), 40–68.

[4] Müller, S., **Rufibach, K. (2008)**. On the max-domain of attraction of distributions with log-concave densities. *Statist. Probab. Lett.*, **78**(12), 1440–1444.

[3] Balabdaoui, F., **Rufibach, K. (2008)**. A second Marshall inequality in convex estimation. *Statist. Probab. Lett.*, **78**(2), 118–126.

[2] **Rufibach, K. (2007)**. Computing Maximum Likelihood Estimators of a log-concave Density Function. *J. Stat. Comput. Simul.*, **77**(7), 561–574.

[1] **Rufibach, K.**, Bertschy, M., Schüttel, M., Vock, M., Wasserfallen, T. **(2001)**. Eintrittsraten und Austrittswahrscheinlichkeiten EVK 2000. *Mitteilungen der Schweizerischen Aktuarvereinigung*, **2001/1**, 49–70.

Letters to the editor in Statistical Journals:

[S2] Hampson, L., Degtyarev, E., Tang, R., Lin, J., **Rufibach, K.**, Zheng, C. **(2023)**. Commentary on "Biostatistical considerations when using RWD and RWE in clinical studies for regulatory purposes: A landscape assessment" by Levenson et al. *Statistics in Biopharmaceutical Research*, **15**(1), 23–26.

[S1] Dukes, O.*, van Lancker, K.*, Bornkamp, B., Heinzmann, D., **Rufibach, K.**, Wolbers, M. **(2021)**. On identification of the principal stratum effect in patients who would comply if treated. *Statistics in Biopharmaceutical Research*, **13**(4), 511–512.
The first four authors contributed equally.

Invited discussions in statistical journals:

[D1] **Rufibach, K. (2010)**. Proposal of the vote of thanks in discussion of Cule, M., Samworth, R., and Stewart, M.: Maximum likelihood estimation of a multidimensional logconcave density. *J. R. Stat. Soc. Ser. B Stat. Methodol.*, 72(5), 577–578.

Statistical papers in refereed proceedings:

[P2] **Rufibach, K.**, Walther, G. **(2007)**. Criteria for multiscale inference. *Proceedings of the 56th Session of the International Statistical Institute, Lisbon, Portugal, 22–29 August 2007.*

[P1] Dümbgen, L., **Rufibach, K.**, Wellner, J.A. **(2007)**. Marshall's lemma for convex density estimation. *Asymptotics: Particles, Processes and Inverse problems (E. Cator, G. Jongbloed, C. Kraaikamp, R. Lopuhaä, J.A. Wellner, eds.), pp. 101-107. IMS Lecture Notes - Monograph Series 55, IMS, Hayward, USA.*

Book reviews:

[BR1] **Rufibach, K. (2011)**. Review of "Introduction to General and Generalized Linear Models" by Henrik Madsen and Poul Thyregod. *Biom. J.*, **53**(4), 705–706.

R packages available from CRAN:

[S13] Erdmann, A. and **Rufibach, K. (2023)**. **simIDM**: Simulating Clinical Trials with Endpoints Progression-Free Survival and Overall Survival using an Illness-Death Model. simIDM.

[S12] **Rufibach, K. (2021)**. **eventTrack**: event Prediction for Time-to-Event Endpoints. eventTrack.

[S11] **Rufibach, K.**, Jordan, P., Abt, M. **(2016)**. **bpp**: Computations Around Bayesian Predictive Power. bpp.

[S10] Hubeaux, S.*, **Rufibach, K. (2014)**. **SurvRegCensCov**: Weibull Regression for a Right-Censored Endpoint with an Arbitrarily Censored Covariate. SurvRegCensCov.
* S. Hubeaux was an intern in Roche Biostatistics Basel working on this project under my supervision.

[S9] Schuhmacher, D., **Rufibach, K.**, Dümbgen, L. **(2011)**. **logconcens**: Maximum likelihood estimation of a log-concave density based on censored data. logconcens.

[S8] **Rufibach, K.**, Balabdaoui, F., Jankowski, H., Weyermann, K. **(2011)**. **logcondiscr**: Estimate a Log-Concave Probability Mass function from Discrete i.i.d. Observations. logcondiscr.

[S7] **Rufibach, K. (2010)**. **selectMeta**: Estimation weight functions in meta analysis. selectMeta.

[S6] **Rufibach, K. (2009)**. **OrdFacReg**: Least squares, logistic, and Cox-regression with ordered predictors. OrdFacReg.

[S5] Balabdaoui, F., **Rufibach, K.**, Santambrogio, F. **(2009)**. **OrdMonReg**: Compute least squares estimates of one bounded or two ordered antitonic regression curves. OrdMonReg.

[S4] **Rufibach, K. (2008)**. **reporttools**: Generate LaTeX tables of descriptive statistics. reporttools.

[S3] **Rufibach, K.**, Walther, G. **(2007)**. **modehunt**: Multiscale analysis about a density. modehunt.

[S2] **Rufibach, K.**, Müller, S. **(2006)**. **smoothtail**: Smooth Estimation of GPD Shape Parameter. smoothtail.

[S1] **Rufibach, K.**, Dümbgen L. **(2006)**. **logcondens**: Estimate a Log-Concave Probability Density from i.i.d. Observations. logcondens.

Contributions to R packages available from CRAN:

The methodology introduced in

[15] **Rufibach, K. (2011)**. A smooth ROC curve estimator based on log-concave density estimates.

is also available in the package pROC (function `smooth()`).

Packages under development but current version publicly available:

[U1] **Rufibach, K.**, with contributions by others. **(2015)**. **biostatUZH**: Misc Tools of the Department of Biostatistics, EBPI, University of Zurich. `http://ebuzh.r-forge.r-project.org/`.

Research articles in Biomedical Journals:

[M61] Le Tourneau, C., André, F., Helland, Å., Mileshkin, L., Minnaard, W., Schiel, A., Taskén, K., Thomas, D.M., Veronse, M.L., Duran-Pacheco, G., Leyens, L., **Rufibach, K.**, Thomas, M., Krämer, A. **(2023)**. Modified study designs to expand treatment options in personalised oncology: A multistakeholder view. *Eur J Cancer*, 194:113278.

[M60] Bachy, E., **Rufibach, K.**, Parreira, J., Launonen, A., Nielsen, T., Hackshaw, A. **(2021)**. Phase III Clinical Trials in First-Line Follicular Lymphoma: A Review of Their Design and Interpretation. *Advances in Therapy*, 38(7):3489-3505.

[M59] Weber, U., Jurik, A.G., Zejden, A., Larsen, E., Hylgaard Jorgensen, S., **Rufibach, K.**, Schioldan, C., Schmidt-Olsen, S. **(2020)**. MRI of the sacroiliac joints in athletes: Recognition of non-specific bone marrow edema by semi-axial added to standard semi-coronal scans. *Rheumatology*, 59, 1381-1390.

[M58] Weber, U., Jurik, A.G., Zejden, A., Larsen, E., Hylgaard Jorgensen, S., **Rufibach, K.**, Schioldan, C., Schmidt-Olsen, S. **(2018)**. Frequency and anatomical distribution of magnetic resonance imaging features in sacroiliac joints of young athletes. *Arthritis Rheumatol*, 70(5), 736-745. *ISI highly cited paper in its field.*

[M57] Marcus, R., Davies, A., Ando, K., Klapper, W., Opat, S., Owen, C., Phillips, E., Sangha, R., Schlag, R., Seymour, J.F., Townsend, W., Trneny, M., Wenger, M., Fingerle-Rowson, G., **Rufibach, K.**, Moore, T., Herold, M., Hiddemann, W. **(2017)**. Obinutuzumab for the First-Line Treatment of Follicular Lymphoma. *N. Engl. J. Med.*, 377(14), 1331-1344. *ISI highly cited paper in its field.*

[M56] Christiansen, A., Hendricks, O., Kuettel, D., Horslev-Petersen, K., Jurik, A.G., Nielsen, S., **Rufibach, K.**, Loft, A.G., Juhl Pedersen, S., Thuesen Hermansen, L., Ostergaard, M., Arnbak, B., Manniche, C., Weber, U. **(2017)**. Limited reliability of radiographic assessment of sacroiliac joints in patients with suspected early spondyloarthritis. *J. Rheumatol.*, 44(1), 70-77.

[M55] Weber, U., Maksymowych, W.P., Chan, S.M., **Rufibach, K.**, Pedersen, S.J., Zhao, Z., Zubler, V., Ostergaard, M., Lambert, R.G.W. **(2015)**. Does evaluation of the ligamentous compartment enhance diagnostic utility of sacroiliac joint MRI in axial spondyloarthritis? *Arthritis Res. Ther.*, 17(1), 246.

[M54] Weber, U., Zhao, Z., **Rufibach, K.**, Zubler, V., Lambert, R.G.W., Chan, S.M., Ostergaard, M., Pedersen, S.J., Maksymowych, W.P. **(2015)**. Diagnostic utility of candidate definitions for a positive MRI of the spine in patients with axial spondyloarthritis. *Arthritis Rheum.*, 67(4), 15, 924-933.

[M53] Steiner, B., Masood, R., **Rufibach, K.**, Niedrist, D., Kundert, O., Riegel, M., Schinzel, A. **(2015)**. An unexpected finding: younger fathers have a higher risk for offspring with chromosomal aneuploidies. *Eur. J. Hum. Genet.*, 23(4), 466-72.

[M52] Weber, U., Ostergaard, M., Lambert, R.G.W., Pedersen, S.J., Chan, S.M., Zubler, V., **Rufibach, K.**, Zaho, Z., Maksymowych, W.P. **(2015)**. Candidate lesion-based criteria for defining a positive sacroiliac joint MRI in two cohorts of patients with axial spondyloarthritis. *Ann. Rheum. Dis.*, 74(11), 1976-82.

[M51] Weber, U., Zubler, V., Zaho, Z., Lambert, R.G.W., Chan, S.M., Pedersen, S.J., Ostergaard, M., **Rufibach, K.**, Maksymowych, W.P. **(2015)**. Does spinal MRI add incremental diagnostic value to MRI of the sacroiliac joints alone in patients with non-radiographic axial spondyloarthritis? *Ann. Rheum. Dis.*, 74(6), 985-992.

[M50] Bergsträsser, E., Paul, M., **Rufibach, K.**, Hain, R.D., Held, L. **(2013)**. The Paediatric Palliative Screening Scale: Further validity testing. *Palliat Med*, 28(6), 530-533.

[M49] Weber, U., Pedersen, S.J., Zubler, V., **Rufibach, K.**, Chan, S.M., Lambert, R.G.W., Ostergaard, M., Maksymowych, W.P. **(2013)**. Fat infiltration on MRI of the sacroiliac joints has limited diagnostic utility in non-radiographic axial spondyloarthritis. *Journal of Rheumatology*, 41(1), 75-83.

[M48] Ciurea, A., Scherer, A., Exer, P., Bernhard, J., Dudler, J., Beyeler, B., Kissling, R., Stekhoven, D., **Rufibach, K.**, Tamborrini, G., Weiss, B., Mueller, R., Nissen, M.J., Michel, B.A., van der Heijde, D., Dougados, M., Boonen, A., Weber, U. **(2013)**. Tumor necrosis factor-a inhibition in radiographic and nonradiographic axial spondyloarthritis: results from a large observational cohort. *Arthritis Rheum*, 65(12), 3096-3106.

[M47] Müller-Pfeiffer, C., **Rufibach, K.**, Wyss, D., Perron, N., Pitman, R.K., Rufer, M. **(2013)**. Screening for Dissociative Disorders in Psychiatric Out- and Day Care-Patients. *J Psychopathol Behav Assess*, 35, 592-602.

[M46] Mica L., **Rufibach, K.**, Keel M., Trentz O. **(2013)**. The risk of early mortality of polytrauma patients associated to ISS, NISS, APACHE II values and prothrombin time. *J Trauma Manag Outcomes*, 24(7), 6.

[M45] Suerder, D., Manka, R., Lo Cicero, V., Moccetti, T., **Rufibach, K.**, Soncin, S., Turchetto, L., Radrizzani, M., Astori, G., Schwitter, J., Erne, P., Zuber, M., Auf der Maur, C., Jamshidi, P., Gaemperli, O., Windecker, S., Moschovitis, A., Wahl, A., Buehler, I., Wyss, C., Kozerke, S., Landmesser, U., Lüscher, T.F., Corti, T. **(2013)**. Intracoronary injection of bone marrow derived mononuclear cells, early or late after acute myocardial infarction: Effects on global left ventricular function. *Circulation*, 127(19), 1968-79.

[M44] Jurik, A.G., Zejden, A., Lambert, R.G.W., **Rufibach, K.**, Hodler, J., Maksymowych, W.P., Duewell, S., Kissling, R.O., Weber, U. **(2013)**. Pitfalls in MR morphology of the sterno-costo-clavicular region by whole body MRI. *Clinical Radiology*, 68, 785-791.

[M43] Faeh, D., Braun, J., **Rufibach, K.**, Puhan, M.A., Marques-Vidal, P., Bopp, M. **(2013)**. Population specific and up to date cardiovascular risk charts can be efficiently obtained with record linkage of routine and observational data. *PLoS ONE*, 8(2), e56149.

[M42] Suerder, D., Pedrazzini, G., Gaemperli, O., Biaggi, P., Felix, C., **Rufibach, K.**, auf der Maur, C., Jeger, R., Buser, P., Kaufmann, B.A., Moccetti, M., Huerlimann, D., Buehler, I., Bettex, D., Scherman, J., Pasotti, E., Faletra, F.F., Zuber, M., Moccetti, T., Lüscher, T.F., Erne, P., Gruenenfelder, J., Corti R. **(2013)**. Mid-term predictors for efficacy of percutaneous mitral valve repair using the Mitraclip system: the results of the MitraSwiss registry. *Heart*, 99, 1034-1040.

[M41] Kohl Schwartz, A.S., Leo, C., **Rufibach, K.**, Varga, Z., Fink, D., Gabriel, N. **(2013)**. Does increased tumor burden of sentinel nodes in breast cancer affect detection procedure? *Eur J Surg Oncol*, 39(3), 266-272.

[M40] Winklhofer, S., Thekkumthala-Sommer, M., Schmidt, D., **Rufibach, K.**, Werner, C.M.L., Wanner, G.A., Alkadhi, H., Hodler, J., Andreisek, G. **(2012)**. MR imaging frequently changes classification of acute traumatic thoracolumbar spine injuries. *Skeletal Radiol.*, 42(6), 779-786.

[M39] Weber, U., Zubler, V., Pedersen, S.J., **Rufibach, K.**, Lambert, R.G.W., Chan, S.M., Ostergaard, M., Maksymowych, W.P. **(2012)**. Development and validation of an MRI reference criterion for defining a positive SIJ MRI in spondyloarthritis. *Arthritis Care Res*, 65(6), 977-985.

[M38] Wulf, M.A., Bode, B., Zimmermann, D., **Rufibach, K.**, Weder, W., Moch, H., Soltermann, A., Tischler, V. **(2012)**. Silver enhanced in-situ hybridization for determination of EGFR copy number alterations in non-small cell lung cancer. *Am J Surg Pathol.*, 36(12), 1801-1808.

[M37] Inauen, C., Platz, A., Meier, C, Zingg, U., **Rufibach, K.**, Spross, C., Dietrich, M. **(2013)**. Quality of Life after Osteosynthesis of Fractures of the Proximal Humerus. *J Orthop Trauma*, 27(4), e74-e80.

[M36] Djahangiri A., Cozzolino A., Zanetti M., Helmy N., **Rufibach, K.**, Jost B., Gerber C. **(2012)**. Outcome of single-tendon rotator cuff repair in patients aged older than 65 years. *J. Shoulder Elbow Surg.*, 22(1), 45-51.

[M35] Graf, N., **Rufibach, K.**, Schmidt, A.M., Fehr, M., Fink, D, Baege, A. **(2013)**. Frequency and Risk Factors of Lower Limb Lymphedema Following Lymphadenectomy in Patients with Gynecological Malignancies. *Eur J Gynaecol Oncol.*, 34(1), 23-7.

[M34] Fröhlich, G.M., **Rufibach, K.**, Wolfrum, M., v. Babo, M., Frank, M., Berli, R., Holzmeister, J., Noll, G., Lüscher, T.F., Ruschitzka, F., Enseleit, F. **(2012)**. Statin Therapy Reduces Cancer Risk and Mortality after Cardiac Transplantation. *Circulation*, 126(4), 440-447.

[M33] Werner, C.M., Ramseier, L.E., Ruckstuhl, T., Stromberg, J., Copeland, C.E., Turen, C.H., **Rufibach, K.**, Bouaicha, S. **(2012)**. Normal values of Wiberg's lateral center-edge angle and Lequesne's acetabular index - a coxometric update. *Skeletal Radiol.*, 41(10), 1273-1278.

[M32] Weber, U., Pedersen, S.J., Ostergaard, M., **Rufibach, K.**, Lambert, R.G.W., Maksymowych, W.P. **(2012)**. Can erosions on MRI of the sacroiliac joints be reliably detected in patients with ankylosing spondylitis? - A cross-sectional study. *Arthritis Res Ther*, 14(3), R124.

[M31] Mueller-Pfeiffer, C., **Rufibach, K.**, Perron, N., Wyss, D., Kuenzler, C., Prezewowsky, C., Pitman, R. K., Rufer M. **(2012)**. Global functioning and disability in dissociative disorders. *Psychiatry Research*, 200, 475-481.

[M30] Emler, C., Jacomella, V., **Rufibach, K.**, Thalhammer, C., Amann-Vesti, B., Husmann, M. **(2013)**. Pressure indices in peripheral arterial disease assessed by infrared photosensors. *Angiology*, 64(2):93-97.

[M29] Spross, C., Platz, A., **Rufibach, K.**, Lattmann, T., Forberger, J., Dietrich, M. **(2012)**. The PHILOS Plate for Proximal Humeral Fractures - Risk Factors for Complications at one Year. *J Trauma Acute Care Surg.*, 72(3), 783-792.

[M28] Poletti-Muringaseril, S., **Rufibach, K.**, Ruef, C., Holzmann, D., Soyka, M. **(2012)**. Low meningitis-incidence in primary spontaneous compared to secondary cerebrospinal fluid rhinorrhoea. *Rhinology*, 50(1):73–79.

[M27] Hahn, F., Erschbamer, M., Allenspach, P., **Rufibach, K.**, Schweizer, A. **(2012)**. Physiological bone responses in the fingers after >10 years of high level sport climbing. *Wilderness Environ Med.*, 23(1), 31–36.

[M26] Weber, U., Lambert, R.G.W., **Rufibach, K.**, Maksymowych, W., Hodler, J., Zejden, A., Duewell, S., Kissling, R.O., Filipow, P.L., Jurik, A.G. **(2012)**. Anterior chest wall inflammation by whole body MRI in patients with spondyloarthritis: Lack of association between clinical and imaging findings in a cross-sectional study. *Arthritis Res Ther*, 14(1), R3.

[M25] Guggenberger, R., Nanz, D., Puippe, G., **Rufibach, K.**, White, L.W., Sussman, M.S., Andreisek, G. **(2012)**. Diffusion tensor imaging of the median nerve: Intra-, inter-reader agreement and agreement between two software packages. *Skeletal Radiol.*, **41**(8), 971–80.

[M24] Soyka, M.D., Nikolaoui, G., **Rufibach, K.**, Holzmann, D. **(2011)**. On the effectiveness of treatment options in epistaxis: An analysis on 678 patients. *Rhinology*, **49**(4), 474–478.

[M23] von Websky*, M., Oberkofler*, C.E., **Rufibach, K.**, Raptis, D.A., Lehmann, K., Hahnloser, D., Clavien, P.A. **(2011)**. Modifying the concept of Job Satisfaction for Surgical Training Programs: Modern management tools ensure trainee motivation and success. *Surgery*, **152**(5), 794–801.

[M22] Allenspach P., Saupe N., **Rufibach, K.**, Schweizer A. **(2011)**. Radiological changes and signs of osteoarthritis in the fingers of male performance sportclimbers. *J Sports Med Phys Fitness*, **51**(3), 497–505.

[M21] Jaberg, L., Toggweiler, S., Puck, M., **Rufibach, K.**, Lüscher, T.F., Corti, R. **(2011)**. The prognostic value of N-terminal proBNP in patients with acute coronary syndromes undergoing left main PCI. *Circ J.*, **75**(11), 2648–2653.

[M20] Britschgi, M., **Rufibach, K.**, Bauer Huang, S.L., Clark, C.M., Kaye, J.A., Li, G., Peskind, E.R., Quinn, J.F., Galasko, D.R., Wyss-Coray, T. **(2011)**. Modeling of pathological traits in Alzheimer's disease based on extracellular signaling proteome. *Mol Cell Proteomics*, **10**(10).

[M19] Taegtmeyer, A.B., Curkovic, I., **Rufibach, K.**, Corti, N., Battegay, E., Kullak-Ublick, G.A. **(2011)**. Electronic prescribing increases uptake of clinical pharmacologists' recommendations in the hospital setting. *Br. J. Clin. Pharmacol.*, **72**(6), 958–64.

[M18] Steurer-Dober I., **Rufibach, K.**, Hodler, J., Saupe, N., Zanetti, M., Fucentese, S., Pfirrmann, C.W.A. **(2010)**. Do Patients with MR Abnormalities of the Shoulder Experience Pain after MR Arthrography of the Shoulder? *Radiology*, **256**(3), 870–878.

[M17] Thalhammer, C., Ferriani, V., Husmann, M., **Rufibach, K.**, Meier, T., Amann-Vesti, B.R. **(2010)**. Predictive value of duplex ultrasound for restenosis after renal artery stenting. *Clin. Hemorheol. Microcirc.*, **45**, 217–224.

[M16] Sürder, D., Schwitter, J., Moccetti, T., Astori, G., **Rufibach, K.**, Plein, S., Lo Cicero, V., Soncin, S., Windecker, S., Moschovitis, A., Wahl, A., Erne, P., Jamshidi, P., Auf der Maur, C., Manka, R., Soldati, Bühler, I., Wyss, C., G., Landmesser, U., Lüscher, T.F., Corti, R. **(2010)**. Cell-based therapy for myocardial repair in patients with acute myocardial infarction: Rationale and study design of the SWiss multicenter Intracoronary Stem cells Study in Acute Myocardial Infarction (SWISS-AMI). *Am Heart J.*, **160**(1), 58–64.

[M15] Soyka, M.B., **Rufibach, K.**, Huber, A., Holzmann, D. **(2010)**. Is Severe Epistaxis Associated With Acetylsalicylic Acid Intake? *Laryngoscope*, **120**(1), 200–207.

[M14] Nocito, A., Wildi, S., **Rufibach, K.**, Clavien, P.A, Weber, M. **(2009)**. Placement of implantable venous access ports in oncologic surgery: A prospective randomized trial comparing venous cut-down versus Seldinger technique. *Br. J. Surg.*, **96**(10), 1129–1134.

[M13] Britschgi, M., Olin, C.E., Johns, H., Takeda-Uchimura, Y., LeMieux, M., **Rufibach, K.**, Rajadas, J., Zhang, H., Tmoooka, B., Robinson, W.H., Clark, C.M., Fagan, A.M., Galasko, D.G., Holtzman, D.M., Jutel, M., Leszek, J., Li, G., Peskind, E.R., Quinn, J.F., Yesavagem, J.A., Ghiso, J.A., and Wyss-Coray, T. **(2009)**. Neuroprotective natural antibodies to assemblies of amyloidogenic peptides decrease with normal aging and advancing Alzheimer's disease. *Proc. Natl. Acad. Sci. U.S.A.*, **106**(29), 12145–12150.

[M12] Weber, U., Hodler, J., Kubik, R.A., **Rufibach, K.**, Lambert, R.G.W., Kissling, R.O., Pfirrmann, C.W.A, Maksymowych, W.P. **(2009)**. Sensitivity and specificity of spinal inflammatory lesions assessed by whole body MRI in spondyloarthritis and recent-onset inflammatory back pain. *Arthritis Rheum*, **61**(7), 900–908.

[M11] Weber, U., Hodler, J., Jurik, A.G., Pfirrmann, C.W.A., **Rufibach, K.**, Kissling, R.O., Khan, M.A., Lambert, R.G.W., Maksymowych, W.P. **(2010)**. Assessment of acute spinal inflammatory changes in patients with spondyloarthritis: Validation of whole body MRI against conventional MRI. *Ann. Rheum. Dis.*, **69**(4), 648–653.

[M10] Weber, U., Maksymowych, W.P., Jurik, A.G., Pfirrmann, C.W.A., **Rufibach, K.**, Kissling, R.O., Khan, M.A., Lambert, R.G.W., Hodler, J. **(2009)**. Validation of whole body MRI against conventional MRI for scoring acute inflammatory lesions in the sacroiliac joints of patients with spondyloarthritis. *Arthritis Rheum*, **61**(7), 893–899.

[M9] Hermanns*, T., Sauermann*, P., **Rufibach, K.**, Frauenfelder, T., Sulser, T., Strebel, R.T. **(2009)**. Is there a role for tamsulosin in the treatment of distal ureteral stones ≤7mm? Results of a randomised, double-blind, placebo-controlled trial. *Eur. Urol.*, **56**(3), 407–412.

[M8] Furrer, M., Schweizer, A., **Rufibach, K.**, Meuli-Simmen, C. **(2009)**. The value of ultrasonography in handsurgery. *Hand*, **4**(4), 385–90.

[M7] Ruhstaller, T., von Moos, R., **Rufibach, K.**, Ribi, K., Glaus, A., Spaeti, B., Koeberle, D., Mueller, U., Hoefliger, M., Hess, D., Boehme, C., Thuerlimann, B. **(2009)**. Breast Cancer Patients on Endocrine Therapy Reveal More Symptoms when Self-Reporting than in Pivotal Trials: An Outcome Research Study. *Oncology*, **76**(2), 142–148.

[M6] Münger-Beyeler, C., Bernhard, J., **Rufibach, K.**, Morant, R., Schmid, H.-P. **(2008)**. Quality of analgesic treatment in patients with advanced prostate cancer: Do we do a better job now? The Swiss Group for Clinical Cancer Research (SAKK) Experience. *Support. Care Cancer*, **16**(5), 461–467.

[M5] Roth, A. D., Fazio, N., Stupp, R., Falk, S., Bernhard, J., Saletti, P., Köberle, D., Borner, M. M., **Rufibach, K.**, Maibach, R., Wernli, M., Mainwaring, P., Harrison, M., Widmer, L., Seymour, M., de Braud, F. **(2007)**. Docetaxel-Cisplatin-5FU versus Docetaxel-Cisplatin versus Epirubicin-Cisplatin-5FU as systemic treatment for advanced gastric carcinoma: A randomized phase II trial of the SAKK. *J. Clin. Oncol.*, **25**(22), 3217–3223.

[M4] Ribi, K., Bernhard, J., **Rufibach, K.**, Thürlimann, B., von Moos, R., Ruhstaller, T., Glaus, A., Böhme, C. **(2007)**. Endocrine symptom assessment in women with breast cancer: what a simple "yes" means. *Support. Care Cancer*, **15**(12), 1349–1356.

[M3] Ghielmini, M., **Rufibach, K.**, Salles, G., Leoncini-Franscini, L., Leger-Falandry, C., Cogliatti, S., Fey, M., Martinelli, G., Stahel, R., Lohri, A., Ketterer, N., Wernli, M., Cerny, T. and Hsu-Schmitz, S. **(2005)**. Single agent rituximab in patients with follicular or mantle cell lymphoma: clinical and biological factors which are predictive of response and event free survival as well as the effect of rituximab on the immune system. *Ann. Oncol.*, **16**(10), 1675–1682.

[M2] Taussky, D., **Rufibach, K.**, Huguenin, P., Allal, A. **(2005)**. Risk factors for developing a second aerodigestive cancer after radiotherapy with or without chemotherapy for head and neck cancer: An exploratory outcome analysis. *Int. J. Radiat. Oncol. Biol. Phys.*, **62**(3), 684–689.

[M1] Huguenin, P., Beer, K., Allal, A., **Rufibach, K.**, Friedli, C., Davies, B. D., Pestalozzi, B., Schmid, S., Thöni, A., Oszahin, M., Bernier, J., Töpfer, M., Kann, R., Meier, U. R., Thum, P., Bieri, S., Notter, M., Lombriser, N., Glanzmann, C. **(2004)**. Concomitant Cisplatin Significantly Improves Loco-Regional Control in Advanced Head and Neck Cancers Treated with Hyperfractionated Radiotherapy. *J. Clin. Oncol.*, **22**(23), 4613–4621.

* all authors contributed equally

Letters to the editor in Biomedical Journals:

[ML3] **Rufibach, K. (2010)**. Use of Brier Score to assess binary predictions. *Journal of Clinical Epidemiology*, **63**(8), 938–939.

[ML2] Zenhäusern, R., von Rohr, A., **Rufibach, K.**, Solenthaler, M., Meyer-Monard, S., Gratwohl, A., Hess, U., Bargetzi, M., Kovacsovic, T., Leoncini, L., Tobler, A. **(2009)**. Low dose 2-chlorodeoxyadenosine given as a single subcutaneous injection in patients with hairy cell leukemia - a multicentre trial SAKK 32/95. *Leuk Lymphoma*, **50**(1), 133–136.

[ML1] Herrmann, R., Lorenz, M., Zuber, M., **Rufibach, K.**, Laffer, U. **(2009)**. Perioperative and adjuvant chemotherapy in colon cancer: results of SAKK trial 40/93. *Int J Colorectal Dis.*, **24**(3), 351–352.

Invited contributions in Biomedical Journals:

[MC1] **Rufibach, K. (2010)**. Assessment of paired binary data. *Skeletal Radiology*, "Perspective section", **40**(1), 1–4.

Unpublished Technical reports:

[TR3] Hubeaux, S., **Rufibach, K. (2014)**. SurvRegCensCov: Weibull Regression for a Right-Censored Endpoint with a Censored Covariate. *Roche Biostatistics Oncology, Basel.*

[TR2] Balabdaoui, F., Jankowski, H., **Rufibach, K.**, Pavlides, M. **(2012)**. The asymptotic distribution of the discrete log-concave maximum likelihood estimator and related applications: Proofs. *CEREMADE, Université Paris-Dauphine, Paris, 1–19.* Contains the proofs of [M16].

[TR1] Dümbgen, L., Hüsler, A., **Rufibach, K. (2010)**. Active Set and EM Algorithms for Log-Concave Densities Based on Complete and Censored Data. *Department of Mathematical Statistics, University of Bern, Technical Report, 61, 1–26.*

Theses:

[Th2] **Rufibach, K. (2006)**. Log-concave Density Estimation and Bump Hunting for i.i.d. Observations. *PhD Thesis, University of Bern, Switzerland and Georg-August University of Göttingen, Germany.*

[Th1] **Rufibach, K. (2001)**. Phasenrekonstruktion von Gleichverteilungen in $\mathbb{R}^d$. *Diploma Thesis, University of Bern, Switzerland.*