

## List of Publications

### Original articles, peer-reviewed

1. **Steffens S**, Thiel H-J, Behrens S-E (1999). *The RNA-dependent RNA polymerases of different members of the family Flaviviridae exhibit similar properties in vitro*. Journal of General Virology, 80(Pt 10): 2583-90
2. **Steffens S**, Frank S, Fischer U, Heuser C, Meyer KL, Dobberstein K-U, Rainov NG, Kramm CM (2000). *EGFP fusion proteins of HSV-TK and cytochrome P450 4B1: Applications for prodrug-activating enzyme gene therapy*. Cancer Gene Therapy, 7(5): 806-12
3. Frank S, **Steffens S**, Fischer U, Heuser C, Rainov NG, Kramm CM (2002). *Differential cytotoxicity and bystander effect of the rabbit cytochrome P450 4B1 enzyme gene by two different prodrugs: Implications for pharmacogene therapy*. Cancer Gene Therapy, 9(2): 178-88
4. Kramm CM, Korholz D, Rainov NG, Niehues T, Fischer U, **Steffens S**, Frank S, Banning U, Horneff G, Schrotten H, Burdach S (2002). *Systemic activation of the immune system during ganciclovir treatment following intratumoral herpes simplex virus type 1 thymidine kinase gene transfer in an adolescent ependymoma patient*. Neuropediatrics, 33(1): 6-9
5. **Steffens S**, Sandquist A, Frank S, Fischer U, Lex C, Rainov NG, Kramm CM (2004). *A neuroblastoma-selective suicide gene therapy approach using the tyrosine hydroxylase promoter*. Pediatric Research, 56(2): 268-7
6. Veillard NR, **Steffens S**, Burger F, Pelli G, Mach F (2004). *Differential expression patterns of pro- and anti-inflammatory mediators during atherogenesis in mice*. Arteriosclerosis, Thrombosis and Vascular Biology, 24(12):2339-44
7. Sena-Esteves M, Tebbets J, **Steffens S**, Crombleholme T, Flake A (2004). *Optimized large-scale production of high titer lentivirus vector pseudotypes*. Journal of Virological Methods, 122(2):131-9
8. **Steffens S**, Tebbets J, Kramm CM, Flake A, Sena-Esteves M (2004). *Transduction of human glial and neuronal tumor cells with different lentivirus vector pseudotypes*. Journal of Neurooncology, 70(3):281-8
9. Fischer U, **Steffens S**, Frank S, Rainov NG, Schulze-Osthoff K, Kramm CM (2005). *Mechanisms of thymidine kinase/ganciclovir and cytosine deaminase/5-fluorocytosine suicide gene therapy-induced cell death in glioma cells*. Oncogene, 24(7):1231-43
10. Arnaud C, Burger F, **Steffens S**, Veillard N, Nguyen TH, Trono D, Mach F (2005). *Statins reduce C-Reactive Protein in hepatocytes: New evidence for anti-inflammatory effects of statins*. Arteriosclerosis, Thrombosis and Vascular Biology, 25(6):1231-6
11. **Steffens S**, Veillard NR, Arnaud C, Pelli G, Burger F, Staub C, Karsak M, Zimmer A, Frossard JL, Mach F (2005). *Low dose oral cannabinoid-therapy reduces progression of atherosclerosis in mice*. Nature, 434(7034):782-6
12. Veillard NR, **Steffens S**, Pelli G, Lu GB, Kwak BR, Gerard C, Charo IF, Mach F (2005). *Differential influence of the chemokine receptors CCR2 and CXCR3 in the development of atherosclerosis in vivo*. Circulation, 112(6):870-8

13. Veillard NR, Braunersreuther V, Arnaud C, Burger F, Pelli G, **Steffens S**, Mach F (2006). *Simvastatin modulates chemokine and chemokine receptor expression by geranylgeranyl isoprenoid pathway in human endothelial cells and macrophages*. *Atherosclerosis*, 188(1): 51-8
14. **Steffens S**, Burger F, Pelli G, Dean Y, Elson G, Kosco-Vilbois M, Chatenoud L, Mach F (2006). *Short-term treatment with CD3 antibody reduces the development and progression of atherosclerosis in mice*. *Circulation*, 114(18):1977-84
15. Braunersreuther V, Zerneck A, Arnaud C, Liehn EA, **Steffens S**, Shagdarsuren E, Bidzhekov K, Burger F, Pelli G, Luckow B, Mach F, Weber C (2007). *CCR5 but not CCR1 deficiency reduces development of diet-induced atherosclerosis in mice*. *Arteriosclerosis, Thrombosis and Vascular Biology*, 27(2):373-9
16. Montecucco F, **Steffens S**, Burger F, Da Costa A, Bianchi G, Bertolotto M, Mach F, Dallegri F, Ottonello L (2008). *Tumor necrosis factor-alpha (TNF-alpha) induces neutrophil migration to the CC chemokine CCL3 (MIP-1 alpha) through defined signaling pathways*. *Cellular Signalling*, 20(3):557-68
17. Montecucco F, Burger F, Mach F, **Steffens S** (2008). *The CB<sub>2</sub> cannabinoid receptor agonist JWH-015 modulates human monocyte migration through defined intracellular signaling pathways*. *American Journal of Physiology – Heart and Circulatory Physiology*, 294(3): H1145-55
18. Braunersreuther V, **Steffens S**, Arnaud C, Pelli G, Burger F, Proudfoot A, Mach F (2008). *A novel RANTES antagonist prevents progression of established atherosclerotic lesions in mice*. *Arteriosclerosis, Thrombosis and Vascular Biology*, 28(6):1090-6
19. Montecucco F<sup>#</sup>, **Steffens S**<sup>#</sup>, Burger F, Mach F (2008). *C-reactive protein (CRP) induces chemokine secretion via CD11b/ICAM-1 interaction in human adherent monocytes*. *Journal of Leukocyte Biology*, 84(4):1109-19  
<sup>#</sup>Equal contribution.
20. Montecucco F, Burger F, Pelli G, Poku NK, Berlier C, **Steffens S**, Mach F (2009). *Statins inhibit C-reactive protein (CRP)-induced chemokine secretion, ICAM-1 upregulation and chemotaxis in adherent human monocytes*. *Rheumatology*, 48(3):233-42
21. Montecucco F<sup>#</sup>, Matias I<sup>#</sup>, Lenglet S, Petrosino S, Burger F, Pelli G, Braunersreuther V, Mach F, **Steffens S**<sup>\*</sup>, Di Marzo V<sup>\*</sup> (2009). *Regulation and possible role of endocannabinoids and related mediators in hypercholesterolemic mice with atherosclerosis*. *Atherosclerosis*, 205(2):433-41  
<sup>#</sup>Equal first/<sup>\*</sup>last author contribution.
22. Montecucco F, Lenglet S, Braunersreuther V, Burger F, Pelli G, Bertolotto M, Mach F and **Steffens S** (2009). *CB<sub>2</sub> cannabinoid receptor activation is cardioprotective in a mouse model of ischemia/reperfusion*. *Journal of Molecular and Cellular Cardiology*, 46(5):612-20
23. Braunersreuther V, Pellieux C, Pelli G, Burger F, **Steffens S**, Montessuit C, Weber C, Proudfoot A, Mach F, Arnaud C (2010). *Chemokine CCL5/RANTES inhibition reduces myocardial reperfusion injury in atherosclerotic mice*. *Journal of Molecular and Cellular Cardiology*, 48(4):789-98

24. Montecucco F, Lenglet S, Bertolotto M, Pelli G, Gayet-Ageron A, Palombo D, Pane B, Spinella G, **Steffens S**, Raffaghello L, Pistoia V, Ottonello L, Pende A, Dallegri F, Mach F (2010). *Systemic and intraplaque mediators of inflammation are increased in patients symptomatic for ischemic stroke*. Stroke, 41(7):1394-404
25. Thomas A, Deglon J, Lenglet S, Mach F, Mangin P, Wolfender J-L, **Steffens S**, Staub C (2010). *High-Throughput Phospholipidic Fingerprinting by Online Desorption of Dried Spots and Quadrupole-Linear Ion Trap Mass Spectrometry: Evaluation of Atherosclerosis Biomarkers in Mouse Plasma*. Analytical Chemistry, 82(15):6687-94
26. Frossard JL, Lenglet S, Montecucco F, **Steffens S**, Galan K, Pelli G, Spahr L, Mach F, Hadengue A (2011). *Role of CCL-2, CCR-2 and CCR-4 in cerulein-induced acute pancreatitis and pancreatitis associated lung injury*. Journal of Clinical Pathology, 64(5): 387-93
27. Quercioli A, Pataky Z, Vincenti G, Makoundou V, Di Marzo V, Montecucco F, Carballo S, Thomas A, Staub C, **Steffens S**, Seimbille Y, Golay A, Ratib O, Harsch E, Mach F, Schindler TH (2011). *Elevated endocannabinoid plasma levels are associated with coronary circulatory dysfunction in obesity*. European Heart Journal, 32(11) : 1369-78

#### Review articles, peer-reviewed

1. **Steffens S**, Mach F (2004). *Inflammation and atherosclerosis*. Herz 29(8):741-8
2. **Steffens S**, Mach F (2004). *Antiinflammatory properties of statins*. Seminars in Vascular Medicine, 4: 417-22
3. **Steffens S**, Mach F (2006). *Toward a therapeutic use of cannabinoid CB(2) receptor in atherosclerosis*. Medecine Science (Paris), 22(1): 7-9
4. **Steffens S**, Mach F (2006). *Towards a therapeutic use of selective cannabinoid receptor ligands for atherosclerosis*. Future Cardiology, 2(1): 49-53
5. **Steffens S**, Mach F (2006). *Drug insight: immunomodulatory effects of statins-potential benefits for renal patients?* Nature Clinical Practice Nephrology, 2(7):378-87
6. **Steffens S**, Mach F (2006). *Cannabinoid receptors in atherosclerosis*. Current Opinion in Lipidology, 17(5): 519-26
7. Braunersreuther V, Mach F, **Steffens S** (2007). *The specific role of chemokines in atherosclerosis*. Thrombosis and Haemostasis, 97(5): 714-21
8. Mach F, Montecucco F, **Steffens S** (2008). *Cannabinoid receptors in acute and chronic complications of atherosclerosis*. British Journal of Pharmacology, 153(2): 290-8
9. Montecucco F, **Steffens S**, Mach F (2007). *The immune response is involved in atherosclerotic plaque calcification: could the RANKL/RANK/OPG system be a marker of plaque instability?* Clinical & Developmental Immunology, 2007: 75805
10. Mach F, **Steffens S** (2008). *The role of the endocannabinoid system in atherosclerosis*. Journal of Neuroendocrinology, 20(Suppl 1): 53-7

11. Montecucco F, **Steffens S**, Mach F (2008). *Insulin resistance: a pro-atherosclerotic condition associated with lipid-induced signaling dysfunction?* Mediators of Inflammation, 2008: 767623
12. Mach F, Montecucco F, **Steffens S** (2009). Blockage of the endocannabinoid system with rimonabant in cardiovascular risk. Pharmacological Reports, 61(1): 13-21
13. Pacher P, **Steffens S** (2009). *The emerging role of the endocannabinoid system in cardiovascular disease.* Seminars in Immunopathology, 31(1): 63-77
14. **Steffens S**<sup>#</sup>, Montecucco F<sup>#</sup>, Mach F (2009). *The inflammatory response as a target to reduce myocardial ischemia and reperfusion injury.* Thrombosis and Hemostasis, 102(2): 240-7  
<sup>#</sup>Equal contribution.
15. Tuma R, **Steffens S** (2011). *Targeting the endocannabinoid system to limit myocardial and cerebral ischemic and reperfusion injury.* Current Pharmaceutical Biotechnology, Apr 6 [Epub ahead of print]
16. Thomas A, Lenglet S, Mach F, Déglon J, Mangin P, Chaurand P, Wolfender J-L, **Steffens S**, Staub C. *Mass spectrometry for evaluation of cardiovascular diseases based on proteomic and lipidomic strategies.* Thrombosis and Hemostasis, May 26 106(1) [Epub ahead of print]

#### Other publications

1. **Steffens S** (1997). *Identification of an RNA-dependent RNA-polymerase of pestiviruses.* Diploma thesis, Justus-Liebig-Universität, Fachbereich Biologie, Giessen, Deutschland
2. **Steffens S** (2002). *Development of a tumorspecific suicide gene therapy for neuroblastomas.* PhD thesis, Heinrich-Heine-Universität Düsseldorf, Deutschland
3. **Steffens S** (2006). *Cannabinoids for therapeutic use in atherosclerosis.* Kardiovaskuläre Medizin, 9: 268-73
4. **Steffens S**, Mach F (2007). *Effets du système cannabinoïde sur les maladies cardiovasculaires.* Cardiovasc, 6:10-12
5. Montecucco F, **Steffens S**, Mach F (2007). *Inflammation as a coronary risk factor.* ARS Medici, 23: 1145-52
6. Mach F, Montecucco F, **Steffens S** (2008). *Role of the endocannabinoid system in atherosclerosis.* CMR Journal, (Official Journal of the International Chair on Cardiometabolic Risk)
7. **Steffens S**, Mach F (2008). *Adiponectin and adaptive immunity: Linking the bridge from obesity to atherogenesis* (Editorial) Circulation Research, 102(2): 140-2

September 27, 2011