

## 7 LITERATURVERZEICHNIS

- 1 Antiplatelet Trialists' Collaboration. Collaborative overview of randomised trials of antiplatelet therapy--I: Prevention of death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients. *BMJ*. 1994; 308(6921):81-106.
- 2 Bauersachs J, Galuppo P, Fraccarollo D, Christ M, Ertl G. Improvement of left ventricular remodeling and function by hydroxymethylglutaryl coenzyme a reductase inhibition with cerivastatin in rats with heart failure after myocardial infarction. *Circulation*. 2001; 104(9):982-5.
- 3 Bertrand ME, Rupprecht HJ, Urban P, Gershlick AH, Investigators FT. Double-blind study of the safety of clopidogrel with and without a loading dose in combination with aspirin compared with ticlopidine in combination with aspirin after coronary stenting: the clopidogrel aspirin stent international cooperative study (CLASSICS). *Circulation*. 2000; 102(6):624-9.
- 4 Bhatt DL, Bertrand ME, Berger PB, et al. Meta-analysis of randomized and registry comparisons of ticlopidine with clopidogrel after stenting. *J Am Coll Cardiol*. 2002; 39(1):9-14.
- 5 Bonetti PO, Lerman LO, Napoli C, Lerman A. Statin effects beyond lipid lowering – are they clinically relevant? *Eur Heart J*. 2003; 24:225-48.
- 6 Boyd RA, Stern RH, Stewart BH, et al. Atorvastatin coadministration may increase digoxin concentrations by inhibition of intestinal P-glycoprotein-mediated secretion. *J Clin Pharmacol*. 2000; 40(1):91-8.
- 7 CAPRIE Steering Committee. A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). *Lancet*. 1996; 348(9038):1329-39.
- 8 Carmeliet P, Jain RK. Angiogenesis in cancer and other diseases. *Nature*. 2000; 407(6801):249-57.
- 9 Clarke TA, Waskell LA. The metabolism of clopidogrel is catalyzed by human cytochrome P450 3A and is inhibited by atorvastatin. *DrugMetabDispos*. 2003; 31(1): 53-9.
- 10 Collisson EA, Carranza DC, Chen IY, Kolodney MS. Isoprenylation is necessary for the full invasive potential of RhoA overexpression in human melanoma cells. *J Invest Dermatol*. 2002; 119(5): 1172-6.
- 11 DiTusa L, Luzier AB. Potential interaction between troglitazone and atorvastatin. *J Clin Pharm Ther*. 2000; 25(4):279-82.

- 12 Downs JR, Clearfield M, Weis S, et al. Primary prevention of acute coronary events with lovastatin in men and women with average cholesterol levels: results of AFCAPS/TexCAPS. Air Force/Texas Coronary Atherosclerosis Prevention Study. *JAMA*. 1998; 279(20):1615-22.
- 13 Duell PB, Connor WE, Illingworth DR. Rhabdomyolysis after taking atorvastatin with gemfibrozil. *Am J Cardiol*. 1998; 81(3):368-9.
- 14 Essler M, Retzer M, Bauer M, Zangl KJ, Tigyi G, Siess W. Stimulation of platelets and endothelial cells by mildly oxidized LDL proceeds through activation of lysophosphatidic acid receptors and the Rho/Rho-kinase pathway. Inhibition by lovastatin. *Ann N Y Acad Sci*. 2000; 905:282-6.
- 15 Fichtenbaum CJ, Gerber JG, Rosenkranz SL, et al. Pharmacokinetic interactions between protease inhibitors and statins in HIV seronegative volunteers: ACTG Study A5047. *AIDS*. 2002; 16(4):569-77.
- 16 Gachet C. Identification, characterization, and inhibition of the platelet ADP receptors. *Int J Hematol*. 2001; 74(4):375-81.
- 17 Gawaz, Meinrad. Das Blutplättchen. Georg Thieme Verlag 1999
- 18 Gawaz M, Seyfarth M, Muller I, et al. Comparison of effects of clopidogrel versus ticlopidine on platelet function in patients undergoing coronary stent placement. *Am J Cardiol*. 2001; 87(3): 332-6, A9.
- 19 Gorchakova O, von Beckerath N, Gawaz M, Mocz A, Joost A, Schomig A, Kastrati A. Antiplatelet effects of a 600 mg loading dose of clopidogrel are not attenuated in patients receiving atorvastatin or simvastatin for at least 4 weeks prior to coronary artery stenting. *Eur Heart J*. 2004;25(21):1898-902.
- 20 Heart Protection Study Collaborative Group. MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20,536 high-risk individuals: a randomised placebo-controlled trial. *Lancet*. 2002; 360(9326):7-22.
- 21 Hermann A, Rauch BH, Braun M, Schror K, Weber AA. Platelet CD40 ligand (CD40L)-- subcellular localization, regulation of expression, and inhibition by clopidogrel. *Platelets*. 2001;12(2):74-82.
- 22 Hsyu PH, Schultz-Smith MD, Lillibridge JH, Lewis RH, Kerr BM. Pharmacokinetic interactions between nelfinavir and 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors atorvastatin and simvastatin. *Antimicrob Agents Chemother*. 2001; 45(12):3445-50.

- 23 Jarvis B, Simpson K. Clopidogrel: a review of its use in the prevention of atherothrombosis. *Drugs.* 2000; 60(2):347-77.
- 24 Jaster M, Fuster V, Rosenthal P, et al. Catheter based intracoronary brachytherapy leads to increased platelet activation. *Heart.* 2004; 90(2):160-4.
- 25 Jaster M, Schwimmbeck P, Spencker S, Schultheiss HP, Rauch U. Randomized comparison of platelet-leukocyte aggregates and platelet activation in blood: heparin-coated coiled wire stent implantation versus balloon angioplasty in acute myocardial infarction. *Thromb Res.* 2003; 112(5-6):285-9.
- 26 Kantola T, Kivistö KT, Neuvonen PJ. Effect of itraconazole on the pharmacokinetics of atorvastatin. *Clin Pharmacol Ther.* 1998; 64(1):58-65.
- 27 Kim S, Jin J, Kunapuli SP. Akt activation in platelets depends on Gi signaling pathways. *J Biol Chem.* 2004; 279(6):4186-95.
- 28 Klages B, Brandt U, Simon MI, Schultz G, Offermanns S. Activation of G12/13 Results in Shape Change and Rho/Rho-Kinase-mediated Myosin Light Chain Phosphorylation in Mouse Platelets. *J Cell Biol.* 1999; 144(4):745-54.
- 29 Kreuzer, Jörg und Tiefenbacher, Christiane. Atherosklerose. Georg Thieme Verlag 2003, S. 20-39
- 30 Lau WC, Waskell LA, Watkins PB, et al. Atorvastatin reduces the ability of clopidogrel to inhibit platelet aggregation. A new drug-drug interaction. *Circulation.* 2003; 107(1): 32-7.
- 31 Laufs U, Wassmann S, Hilgers S, Ribaudo N, Bohm M, Nickenig G. Rapid effects on vascular function after initiation and withdrawal of atorvastatin in healthy normocholesterolemic men. *Am J Cardiol.* 2001; 88:1306-7.
- 32 Lennernas H. Clinical pharmacokinetics of atorvastatin. *Clin Pharmacokinet.* 2003; 42(13):1141-60.
- 33 Lennernas H, Fager G. Pharmacodynamics and pharmacokinetics of the HMG-CoA reductase inhibitors. Similarities and differences. *Clin Pharmacokinet.* 1997; 32(5):403-25.
- 34 Lewin JJ 3rd, Nappi JM, Taylor MH. Rhabdomyolysis with concurrent atorvastatin and diltiazem. *Ann Pharmacother.* 2002; 36(10):1546-9.
- 35 Li N, Hu H, Hjemdahl P. Aspirin treatment does not attenuate platelet or leukocyte activation as monitored by whole blood flow cytometry. *Thromb Res.* 2003; 111(3):165-70.
- 36 Prevention of cardiovascular events and death with pravastatin in patients with coronary heart disease and a broad range of initial cholesterol levels. The Long-Term Intervention with Pravastatin in Ischaemic Disease (LIPID) Study Group. *N Engl J Med.* 1998; 339(19):1349-57.

- 37 Mach F, Senouf D, Fontana P, Boehlen F, Reber G, Daali Y, de Moerloose P, Sigwart U. Not all statins interfere with clopidogrel during antiplatelet therapy. *Eur J Clin Invest.* 2005;35(8):476-81.
- 38 Mahaut-Smith MP, Ennion SJ, Rolf MG, Evans RJ. ADP is not an agonist at P2X(1) receptors: evidence for separate receptors stimulated by ATP and ADP on human platelets. *Br J Pharmacol.* 2000; 131(1):108-14.
- 39 Maltz HC, Balog DL, Cheigh JS. Rhabdomyolysis associated with concomitant use of atorvastatin and cyclosporine. *Ann Pharmacother.* 1999; 33(11):1176-9.
- 40 Matzno S, Tazuya-Murayama K, Tanaka H, et al. Evaluation of the synergistic adverse effects of concomitant therapy with statins and fibrates on rhabdomyolysis. *J Pharm Pharmacol.* 2003; 55(6):795-802.
- 41 Mazzu AL, Lasseter KC, Shamblen EC, Agarwal V, Lettieri J, Sundaresen P. Itraconazole alters the pharmacokinetics of atorvastatin to a greater extent than either cerivastatin or pravastatin. *Clin Pharmacol Ther.* 2000; 68(4):391-400.
- 42 Mc Donnell CG, Harte S, O'Driscoll J, O'Loughlin C, Van Pelt FN, Shorten GD. The effects of concurrent atorvastatin therapy on the pharmacokinetics of intravenous midazolam. *Anaesthesia.* 2003; 58(9):899-904.
- 43 Mehta SR, Yusuf S, Peters RJ, et al. Clopidogrel in Unstable angina to prevent Recurrent Events trial (CURE) Investigators. Effects of pretreatment with clopidogrel and aspirin followed by long-term therapy in patients undergoing percutaneous coronary intervention: the PCI-CURE study. *Lancet.* 2001; 358(9281):527-33.
- 44 Missy K, Plantavid M, Pacaud P, Viala C, Chap H, Payrastre B. Rho-kinase is involved in the sustained phosphorylation of myosin and the irreversible platelet aggregation induced by PAR1 activating peptide. *Thromb Haemost.* 2001; 85(3): 514-20.
- 45 Mitsios JV, Papathanasiou AI, Rodis FI, Elisaf M, Goudevenos JA, Tselepis AD. Atorvastatin does not affect the antiplatelet potency of clopidogrel when it is administered concomitantly for 5 weeks in patients with acute coronary syndromes. *Circulation.* 2004; 109(11):1335-8.
- 46 Mukherjee D, Kline-Rogers E, Fang J, Munir K, Eagle KA. Lack of clopidogrel-CYP3A4 statin interaction in patients with acute coronary syndrome. *Heart.* 2005;91(1):23-6.
- 47 Muller I, Besta F, Schulz C, Li Z, Massberg S, Gawaz M. Effects of statins on platelet inhibition by a high loading dose of clopidogrel. *Circulation.* 2003;108(18):2195-7.

- 48 Neubauer H, Gunesdogan B, Hanefeld C, Spiecker M, Mugge A. Lipophilic statins interfere with the inhibitory effects of clopidogrel on platelet function--a flow cytometry study. *Eur Heart J.* 2003; 24(19):1744-9.
- 49 Notarbartolo A, Davi G, Averna M, et al. Inhibition of thromboxane biosynthesis and platelet function by simvastatin in type IIa hypercholesterolemia. *Arterioscler Thromb Vasc Biol.* 1995; 15(2):247-51.
- 50 Offermanns S, Laugwitz KL, Spicher K, Schultz G. G proteins of the G12 family are activated via thromboxane A2 and thrombin receptors in human platelets. *Proc Natl Acad Sci U S A.* 1994; 91(2): 504-8.
- 51 Osamah H, Mira R, Sorina S, Shlomo K, Michael A. Reduced platelet aggregation after fluvastatin therapy is associated with altered platelet lipid composition and drug binding to the platelets. *Br J Clin Pharmacol.* 1997; 44(1):77-83.
- 52 Osende JI, Fuster V, Lev EI, et al. Testing platelet activation with a shear-dependent platelet function test versus aggregation-based tests. Relevance for monitoring long-term glycoprotein IIb/IIIa inhibition. *Circulation.* 2001; 103(11):1488-91.
- 53 Puccetti L, Pasqui AL, Pastorelli M, et al. Time-dependent effect of statins on platelet function in hypercholesterolaemia. *Eur J Clin Invest.* 2002; 32(12):901-8.
- 54 Raffael A, Nebe CT, Valet G. Grundlagen der analytischen Durchflußzytometrie. In: Schmitz G, Rothe G. Durchflußzytometrie in der klinischen Zelldiagnostik. Schattauer, 1994:3-49,
- 55 Rauch U, Crandall J, Osende JI et al. Increased thrombus formation relates to ambient blood glucose and leukocyte count in diabetes mellitus type 2. *Am J Cardiol.* 2000; 86(2):246-9.
- 56 Rauch U, Nemerson Y. Circulating tissue factor and thrombosis. *Curr Opin Hematol.* 2000; 7(5):273-7.
- 57 Rauch U, Nemerson Y. Tissue factor, the blood, and the arterial wall. *Trends Cardiovasc Med.* 2000; 10(4):139-43.
- 58 Rauch U, Osende JI, Chesebro JH, et al. Statins and cardiovascular diseases: the multiple effects of lipid-lowering therapy by statins. *Atherosclerosis.* 2000; 153:181-9.
- 59 Rauch U, Osende JI, Fuster V, Badimon JJ, Fayad Z, Chesebro JH. Thrombus formation on atherosclerotic plaques: pathogenesis and clinical consequences. *Ann Intern Med.* 2001; 134(3): 224-38.
- 60 Rauch U, Wolff UM, Schultheiss HP, Schwimmbeck PL. Leukocyte CD15 expression and platelet activation in the coronary sinus after coronary intervention. *Pathophysiol Haemost Thromb.* 2003; 33(2):109-15.

- 61 Reinoso RF, Sanchez NA, Garcia MJ, Prous JR. Pharmacokinetic interactions of statins. *Methods Find Exp Clin Pharmacol.* 2001; 23(10):541-66.
- 62 Renders L, Mayer-Kadner I, Koch C, et al. Efficacy and drug interactions of the new HMG-CoA reductase inhibitors cerivastatin and atorvastatin in CsA-treated renal transplant recipients. *Nephrol Dial Transplant.* 2001; 16(1):141-6.
- 63 Retzer M, Siess W, Essler M. Mildly oxidised low density lipoprotein induces platelet shape change via Rho-kinase-dependent phosphorylation of myosin light chain and moesin. *FEBS Lett.*; 466(1): 70-4.
- 64 Ross R. The pathogenesis of atherosclerosis: an update. *N Engl J Med.* 1986; 314:488-500.
- 65 Ross R. Atherosclerosis is an inflammatory disease. *Am Heart J.* 1999; 138(5 Pt 2):S419-20.
- 66 Sacks FM, Pfeffer MA, Moye LA, et al. The effect of pravastatin on coronary events after myocardial infarction in patients with average cholesterol levels. Cholesterol and Recurrent Events Trial investigators. *N Engl J Med.* 1996; 335(14):1001-9.
- 67 Savcic M, Hauert J, Bachmann F, Wyld PJ, Geudelin B, Cariou R. Clopidogrel loading dose regimens: kinetic profile of pharmacodynamic response in healthy subjects. *Semin Thromb Hemost.* 1999; 25 Suppl 2:15-9.
- 68 Savi P, Combalbert J, Gaich C, et al. The antiaggregating activity of clopidogrel is due to a metabolic activation by the hepatic cytochrome P450-1A. *Thromb Haemost.* 1994; 72(2): 313-7.
- 69 Savi P, Pereillo JM, Uzabiaga MF, et al. Identification and biological activity of the active metabolite of clopidogrel. *Thromb Haemost.* 2000; 84(5):891-6.
- 70 Saw J, Steinhubl SR, Berger PB, et al. Lack of adverse clopidogrel-atorvastatin clinical interaction from secondary analysis of a randomized, placebo-controlled clopidogrel trial. *Circulation.* 2003; 108(8):921-4.
- 71 Schmitz G, Rothe G, Ruf A et al. European Working Group on Clinical Cell Analysis: Consensus protocol for the flow cytometric characterisation of platelet function. *Thromb Haemost.* 1998; 79(5): 885-96.
- 72 Schror K, Lobel P, Steinhagen-Thiessen E. Simvastatin reduces platelet thromboxane formation and restores normal platelet sensitivity against prostacyclin in type IIa hypercholesterolemia. *Eicosanoids.* 1989; 2(1):39-45.
- 73 Siedlik PH, Olson SC, Yang BB, Stern RH. Erythromycin coadministration increases plasma atorvastatin concentrations. *J Clin Pharmacol.* 1999; 39(5):501-4.
- 74 Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S). *Lancet.* 1994; 344(8934):1383-9.

- 75 Serebruany VL, Midei MG, Malinin AI, Oshrine BR, Lowry DR, Sane DC, Tanguay JF, Steinhubl SR, Berger PB, O'Connor CM, Hennekens CH. Absence of interaction between atorvastatin or other statins and clopidogrel: results from the interaction study. *Arch Intern Med.* 2004;164(18):2051-7.
- 76 Shepherd J, Cobbe SM, Ford I et al. Prevention of coronary heart disease with pravastatin in men with hypercholesterolemia. West of Scotland Coronary Prevention Study Group. *N Engl J Med.* 1995; 333(20):1301-7.
- 77 Smith JW, Steinhubl SR, Lincoff AM, et al. Rapid platelet function assay. An automated and quantitative cartridge-based method. *Circulation.* 1999; 99(5): 620-5.
- 78 Soulet C, Sauzeau V, Plantavid M, et al. Gi-dependent and -independent mechanisms downstream of the P2Y12 ADP-receptor. *J Thromb Haemost.* 2004; 2(1): 135-46.
- 79 Splichal JE, Stamm JA, Ornstein DL. The statins: multifunctional antithrombotic and antineoplastic drugs. *Semin Thromb Hemost.* 2003; 29(3): 259-74.
- 80 Steinhubl SR, Berger PB, Mann JT 3rd, et al; CREDO Investigators. Clopidogrel for the Reduction of Events During Observation. Early and sustained dual oral antiplatelet therapy following percutaneous coronary intervention: a randomized controlled trial. *JAMA.* 2002; 288(19):2411-20.
- 81 Steinhubl SR, Talley JD, Braden GA, et al. Point-of-care measured platelet inhibition correlates with a reduced risk of an adverse cardiac event after percutaneous coronary intervention. Results of the GOLD (AU-assessing Ultegra) multicenter study. *Circulation.* 2001; 103(21):2572-8.
- 82 Strödter, Dietrich. Evidenz basierte Therapie in der Kardiologie. UNI-MED Verlag 2003.
- 83 Southworth MR, Mauro VF. The use of HMG-CoA reductase inhibitors to prevent accelerated graft atherosclerosis in heart transplant patients. *Ann Pharmacother.* 1997; 31(4):489-91.
- 84 Tannous M, Cheung R, Vignini A, Mutus B. Atorvastatin increases ecNOS levels in human platelets of hyperlipidemic subjects. *Thromb Haemost.* 1999; 82(5):1390-4.
- 85 Taubert D, Kastrati A, Harlfinger S, et al. Pharmacokinetics of clopidogrel after administration of a high loading dose. *Thromb Haemost.* 2004; 92(2):311-6.
- 86 Tschoepe D, Roesen P, Schwippert B, et al. Platelet analysis using flow-cytometric procedures. *Platelets.* 1990; 1:127-133.
- 87 Vinholt P, Poulsen TS, Korsholm L, Kristensen SR, Hallas J, Damkier P, Mickley H. The antiplatelet effect of clopidogrel is not attenuated by statin treatment in stable patients with ischemic heart disease. *Thromb Haemost.* 2005;94(2):438-43.

- 88 Weber AA, Braun M, Hohlfeld T, Schwippert B, Tschope D, Schror K. Recovery of platelet function after discontinuation of clopidogrel treatment in healthy volunteers. *Br J Clin Pharmacol.* 2001; 52(3):333-6.
- 89 Weikert U, Kuhl U, Schultheiss HP, Rauch U. Platelet activation is increased in patients with cardiomyopathy: myocardial inflammation and platelet reactivity. *Platelets.* 2002; 13(8): 487-91.
- 90 Weikert U, Rauch U, Kuhl U, et al. Increased thrombocyte activation in dilated cardiomyopathy: a risk factor for development of ventricular thrombosis despite anticoagulant therapy? *Z Kardiol.* 2002; 91(5): 423-9.
- 91 Weis M, Heeschen C, Glassford AJ, Cooke JP. Statins have biphasic effects on angiogenesis. *Circulation.* 2002; 105(6):739-45.
- 92 Wenisch C, Krause R, Fladerer P, El Menjawi I, Pohanka E. Acute rhabdomyolysis after atorvastatin and fusidic acid therapy. *Am J Med.* 2000; 109(1):78.
- 93 Werner N, Nickenig G, Laufs U. Pleiotropic effects of HMG-CoA reductase inhibitors. *Basic Res Cardiol.* 2002; 97:105-16.
- 94 Wienbergen H, Gitt AK, Schiele R, et al; MITRA PLUS Study Group. Comparison of clinical benefits of clopidogrel therapy in patients with acute coronary syndromes taking atorvastatin versus other statin therapies. *Am J Cardiol.* 2003; 92(3):285-8.
- 95 van Willigen G, Gorter G, Akkerman JW. LDLs increase the exposure of fibrinogen binding sites on platelets and secretion of dense granules. *Arterioscler Thromb.* 1994; 14(1):41-6.
- 96 Yusuf S, Wittes J, Friedman L. Overview of results of randomized clinical trials in heart disease. II. Unstable angina, heart failure, primary prevention with aspirin, and risk factor modification. *JAMA.* 1988; 260(15):2259-63.
- 97 Yusuf S, Zhao F, Mehta SR, Chrolavicius S, Tognoni G, Fox KK; Clopidogrel in Unstable Angina to Prevent Recurrent Events Trial Investigators. Clopidogrel in Unstable Angina to Prevent Recurrent Events Trial Investigators. Effects of clopidogrel in addition to aspirin in patients with acute coronary syndromes without ST-segment elevation. *N Engl J Med.* 2001; 345(7):494-502.