

Literaturverzeichnis

Anderson JL, Carlquist JF, Muhlestein JB, Horne BD, Elmer SP. Evaluation of C-reactive protein, an inflammatory marker, and infectious serology as risk factors for coronary artery disease and myocardial infarction. *J Am Coll Cardiol* 1998; 32:35-41.

Andreoletti L, Hober D, Decoene C, et al. Detection of enteroviral RNA by polymerase chain reaction in endomyocardial tissue of patients with chronic cardiac diseases. *J Med Virol* 1996; 48:53-9.

Andreoletti L, Bourlet T, Moukassa D, et al. Enteroviruses can persist with or without active viral replication in cardiac tissue of patients with end-stage ischemic or dilated cardiomyopathy. *J Infect Dis* 2000; 182:1222-7.

Archard LC, Khan MA, Soteriou BA, Zhang H, Why HJ, Robinson NM, Richardson PJ. Characterization of Coxsackie B virus RNA in myocardium from patients with dilated cardiomyopathy by nucleotide sequencing of reverse transcription-nested polymerase chain reaction products. *Hum Pathol* 1998; 29:578-84.

Aretz HT, Billingham ME, Edwards WD, et al. A histopathologic definition and classification. *Am J Cardiovasc Pathol* 1986; 1:3-14.

AWMF-Leitlinien. Elektronische Publikationen der Deutschen Gesellschaft für Kardiologie, Herz- und Kreislaufforschung: awmf@uni-duesseldorf.de

Baboonian C, Treasure T. Meta-analysis of the association of enteroviruses with human heart disease. *Heart* 1997; 78:539-43.

Balk AHMM, Maat APWM, Weimar W, et al. Heart transplantation: Guidelines for the referring cardiologist. *Cardiologie* 1998; 5:702-15.

Barbaro G, Di Lorenzo G, Grisorio B, Barbarini G. Incidence of dilated cardiomyopathy and detection of HIV in myocardial cells of HIV-positive patients. *N Engl J Med* 1998; 339:1093-9.

Bauer HM, Ting Y, Greer CE, et al. Genital human papillomavirus infection in female university students as determined by a PCR-based method. *JAMA* 1991; 265:472-7.

Bauer S, Gottesman G, Sirota L, Litmanovitz I, Ashkenazi S, Levi I. Severe Coxsackie virus B infection in preterm newborns treated with pleconaril. *Eur J Pediatr* 2002; 161:491-3.

- Berenisci K**, Endresz V, Klurfeld D, et al. Early atherosclerotic plaques in the aorta following cytomegalovirus infection of mice. *Cell Adhes Commun* 1998; 5:39-47.
- Bergelson JM**, Mohanty JG, Crowell RL, St. John NF, Lublin DF, Finberg RW. Coxsackievirus B3 adapted to growth in RD cells binds to decay-accelerating factor (CD55). *J Virol* 1995; 69:1903-6.
- Bergelson JM**, Cunningham JA, Drogue G, et al. Isolation of a common receptor for Coxsackie B viruses and adenoviruses 2 and 5. *Science* 1997a; 275:1320-3.
- Bergelson JM**, Modlin JF, Wieland-Alter W, Cunningham JA, Crowell RL, Finberg RW. Clinical coxsackievirus B isolates differ from laboratory strains in their interaction with two cell surface receptors. *J Infect Dis* 1997b; 175:697-700.
- Bernabeu-Wittel M**, Canas Garcia-Otero E, Herrero Romero M, et al. Infectious complications of heart transplantation. A prospective study for the first 6 years of a transplantation program. *Rev Clin Esp* 1999; 199:489-95.
- Binah O**. Cytotoxic lymphocytes and cardiac electrophysiology. *J Mol Cell Cardiol* 2002; 34:1147-61.
- Blankenberg S**, Rupprecht HJ, Bickel C, et al. Cytomegalovirus infection with interleukin-6 response predicts cardiac mortality in patients with coronary artery disease. *Circulation* 2001; 103:2915-21.
- Botten J**, Mirowsky K, Kusewitt D, et al. Experimental infection model for Sin Nombre hantavirus in the deer mouse (*Peromyscus maniculatus*). *PNAS* 2000; 97:10578-83.
- Botten J**, Mirowsky K, Kusewitt D, et al. Persistent Sin Nombre virus infection in the deer mouse (*Peromyscus maniculatus*) model: Sites of replication and strand-specific expression. *J Virol* 2003; 77:1540-50.
- Bowles NE**, Vallejo J. Viral causes of cardiac inflammation. *Curr Opin Cardiol* 2003; 18:182-8.
- Bowles NE**, Kearney DL, Ni J et al. The detection of viral genomes by polymerase chain reaction in the myocardium of pediatric patients with advanced HIV. *J Am Coll Cardiol* 1999; 34:857-65.
- Bowles NE**, Ni J, Kearney DL et al. Detection of viruses in myocardial tissues by polymerase chain reaction. Evidence of adenovirus as a common cause of myocarditis in children and adults. *J Am Coll Cardiol* 2003; 42:466-72.
- Brown KE**, Anderson SM, Young NS. Erythrocyte P antigen: cellular receptor for B19 parvovirus. *Science* 1993; 262:114-7.

Bruggeman CA. Does cytomegalovirus play a role in atherosclerosis? *Herpes* 2000; 7:51-4.

Bruggeman CA, Marjorie HJ, Nelissen-Vrancken G. Cytomegalovirus and atherogenesis. *Antiviral Res* 1999; 43:135-44.

Bültmann BD, Klingel K, Sotlar K, et al. Fatal Parvovirus B19-associated myocarditis clinically mimicking ischemic heart disease: An endothelial cell-mediated disease. *Human Pathol* 2003; 34:92-5.

Bundesärztekammer. Richtlinien zur Organtransplantation gemäß §16 Transplantationsgesetz. Anforderungen an die im Zusammenhang mit einer Organentnahme und –übertragung erforderlichen Maßnahmen zur Qualitätssicherung. *Deutsches Ärzteblatt* 98, Heft 34-35, 27.August 2001.

Burkhardt F. Mikrobiologische Diagnostik. Stuttgart: Thieme Verlag, 1992.

Caforio AL, Goldman JH, Haven AJ, Baig KM, McKenna WJ. Evidence for autoimmunity to myosin and other heart-specific autoantigens in patients with dilated cardiomyopathy and their relatives. *Int J Cardiol* 1996; 54:157-63.

Caforio AL, Mahon NJ, Tona F, McKenna WJ. Circulating cardiac antibodies in dilated cardiomyopathy and myocarditis: Pathogenetic and clinical significance. *Eur J Heart Fail* 2002; 4:411-7.

Cardullo RA, Agrawal S, Flores C, Zamecnik PC, Wolf DE. Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer. *PNAS* 1988; 85:8790-4.

Carson S, Chapman NM, Tracy S. Purification of the putative coxsackievirus B receptor from HeLa cells. *Biochem Biophys Res Comm* 1997; 233:325-8.

Chen R, Xiong S, Yang Y, Fu W, Wang Y, Ge J. The relationship between human cytomegalovirus infection and atherosclerosis development. *Mol Cell Biochem* 2003; 249:91-6.

Chirgwin JM, Przybyla AE, MacDonald RJ, Rutter WJ. Isolation of biological active ribonucleic acid isolated from sources enriched in ribonuclease. *Biochemistry* 1979; 18:5294-9.

Chomczynski P, Sacchi N. Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction. *Anal Biochem* 1987; 162:156-9.

Chow LH, Beisel KW, McManus. Enteroviral infection of mice with severe combined immunodeficiency. Evidence for direct viral pathogenesis of myocardial injury. *Lab Invest* 1992; 66:24-31.

COE. Guide to safety and quality assurance for organs, tissues and cells. Strasbourg: Council of Europe, 2002.

Cowie MR, Wood DA, Coats AJS, Thompson SG, Poole-Wilson PA, Suresh V, Sutton GC. Incidence and aetiology of heart failure: A population-based study. *Eur Heart J* 1999; 20:421-8.

Craig ME, Robertson P, Howard NJ, Silink M, Rawlinson WD. Diagnosis of enterovirus infection by genus-specific PCR and enzyme-linked immunosorbent assays. *J Clin Microbiol* 2003; 41:841-4.

Cunnion RE, Parrillo JE. Immunosuppressive therapy for myocarditis [letter; comment]. *N Engl J Med* 1995; 333: 1713-4.

Danesh J. Coronary heart disease, *Helicobacter pylori*, dental disease, *Chlamydia pneumoniae*, and cytomegalovirus: meta-analyses of prospective studies. *Am Heart J* 1999; 138:S434-7.

Danesh J, Collins R, Peto R. Chronic infections and coronary heart disease: Is there a link? *Lancet* 1997; 349:430-6.

Danesh J, Whincup P, Walker M, et al. *Chlamydia pneumoniae* IgG titres and coronary heart disease: prospective study and meta-analysis. *Br Med J* 2000; 321:208-13.

Davies JM. Molecular mimicry: Can epitope mimicry induce autoimmune disease? *Immunol Cell Biol* 1997; 75:113-26.

Dec GW, Fuster V. Idiopathic dilated cardiomyopathy. *N Engl J Med* 1994; 331:1564-75.

Deguchi H, Fujioka S, Terasaki F, et al. Enterovirus RNA replication in cases of dilated cardiomyopathy: light microscopic *in situ* hybridization and virological analyses of myocardial specimens obtained at partial left ventriculectomy. *J Card Surg* 2001; 16:64-71.

Dettmeyer R, Kandolf R, Baasner A, Banaschak S, Eis-Hübinger AM, Madea B. Fatal parvovirus B19 myocarditis in an 8-year-old boy. *J Forensic Sci* 2003; 48:183-6.

DHZB. Jahresbericht 2001 des Homograftlabors des DHZB. Berlin: DHZB, 2002. (www.dhzb.de/hgl/)

DHZB. Jahresbericht 2003 des Homograftlabors des DHZB. Berlin: DHZB, 2004. (www.dhzb.de/hgl/)

Donoso Mantke O, Meyer R, Prösch S, Pregla R, Niedrig M. Nachweis viraler Genomstrukturen im Myokardgewebe von Herzklappenspendern. Z Herz-, Thorax-, Gefäßchir 2003; 17:9-16
(www.springerlink.com)

Donoso Mantke O, Nitsche A, Meyer R, Klingel K, Niedrig M. Analysing myocardial tissue from explanted hearts of heart transplant recipients and multi-organ donors for the presence of parvovirus B19 DNA. J Clin Virol 2004a; 31:32-9.

Donoso Mantke O, Meyer R, Prösch S, Niedrig M. Frequent detection of viral nucleic acids in heart valve tissue. J Clin Microbiol 2004b; 42:2298-300.

Dorfell WV, Wallukat G, Baumann G, et al. Immunoabsorption in dilated cardiomyopathy. Ther Apher 2000; 4:235-8.

DSO. Organspende und Transplantation in Deutschland. Jahresbericht 2001 der Deutschen Stiftung Organtransplantation (DSO). Neu-Isenburg: DSO, 2002.

Dunn J, Chapman NM, Tracy S, Romero J. Genomic determinants of cardiovirulence in Coxsackievirus B3 clinical isolates: Localization to the 5' nontranslated region. J Virol 2000; 74:4787-94.

Einsele H, Vallbracht A, Jahn G, Kandolf R, Muller CA. Hybridization techniques provide improved sensitivity for HCMV detection and allow quantitation of the virus in clinic samples. J Virol Methods 1989; 26:91-104.

Ellis RW. Infection and coronary heart disease. J Med Microbiol 1997; 46:535-9.

Enders G, Dotsch J, Bauer J, et al. Life-threatening parvovirus B19-associated myocarditis and cardiac transplantation as possible therapy: Two case reports. Clin Infect Dis 1998; 26:355-8.

Epstein SE, Zhu J, Burnet MS, Zhou YF, Vercellotti G, Hajjar D. Infection and atherosclerosis. Potential roles of pathogen burden and molecular mimicry. Arterioscler Thromb Vasc Biol 2000; 20:1417-20.

Fabricant CG, Fabricant J. Atherosclerosis induced by infection with Marek's disease virus in chickens. Am Heart J 1999; 138:S465-8.

Feuer R, Mena I, Pagarigan RR, Slifka MK, Whitton JL. Cell cyclic status affects coxsackievirus replication, persistence, and reactivation in vitro. J Virol 2002; 76:4430-40.

Feuer R, Mena I, Pagarigan RR, Hassett DE, Whitton JL. Coxsackievirus replication and the cell cycle: a potential regulatory mechanism for viral persistence/latency. *Med Microbiol Immunol* 2004; 193:83-90.

Fransen K, Mortier D, Heyndrickx L, Verhofstede C, Janssens W, van der Groen G. Isolation of HIV-1 RNA from plasma: Evaluation of seven different methods for extraction (part two). *J Virol Methods* 1998; 76:153-7.

Fujioka S, Kitaura Y, Ukimura A, et al. Evaluation of viral infection in the myocardium of patients with idiopathic dilated cardiomyopathy. *J Am Coll Cardiol* 2000; 36:1920-6.

Fukae S, Ashiwaza N, Morikawa S, Yano K. A fatal case of fulminant myocarditis with human herpesvirus-6 infection. *Intern Med* 2000; 39:632-6.

Gallo P, Agozzino L, Angelini A, et al. Causes of late failure after heart transplantation: A ten-year survey. *J Heart Lung Transplant* 1997; 16:1113-21.

Gao SZ, Chaparro SV, Perlroth M, et al. Post-transplantation lymphoproliferative disease in heart and heart-lung transplant recipients: 30-year experience at Stanford University. *J Heart Lung Transplant* 2003; 22:505-14.

Gauntt CJ, Arizpe HM, Higdon, et al. Molecular mimicry, anti-coxsackievirus B3 neutralizing monoclonal antibodies, and myocarditis. *J Immunol* 1995; 154:2983-95.

Giacca M, Severini GM, Mestroni L, Salvi A, Lardieri G, Falaschi A, Camerini F. Low frequency of detection by nested polymerase chain reaction of enterovirus ribonucleic acid in endomyocardial tissue of patients with idiopathic dilated cardiomyopathy. *J Am Coll Cardiol* 1994; 24:1033-40.

Giles C, Shuttleworth EM. Postmortem findings in 46 influenza deaths. *Lancet* 1957; 273: 1224-5.

Gottesdiener KM. Transplanted infections: donor-to-host transmission with the allograft. *Ann Intern Med* 1989; 110:1001-16.

Griffin LD, Kearney D, Ni J, et al. Analysis of formalin-fixed and frozen myocardial autopsy samples for viral genome in childhood myocarditis and dilated cardiomyopathy with endocardial fibroelastosis using polymerase chain reaction (PCR). *Cardiovasc Pathol* 1995; 4:3-11.

Gulizia JM, Kandolf R, Kendall TJ, et al. Infrequency of cytomegalovirus genome in coronary arteriopathy of human heart allografts. *Am J Pathol* 1995; 147:461-75.

Gullestad L, Aass H, Fjeld JG, et al. Immunomodulating therapy with intravenous immunoglobulin in patients with chronic heart failure. *Circulation* 2001; 103:220-5.

Gupta S, Camm AJ. Is there an infective aetiology to atherosclerosis? *Drugs Aging* 1998a; 13:1-7.

Gupta S, Camm AJ. *Chlamydia pneumoniae*, antimicrobial therapy and coronary disease: A critical overview. *Coron Artery Dis* 1998b; 9:339-43.

Hahn EA, Hartz VL, Moon TE, et al. The Myocarditis Treatment Trial: Design, methods and patients enrolment. *Eur Heart J* 1995; 16 (Suppl O):162-7.

Hakim M, Wreggitt TG, English TA, Stovin PG, Cory-Pearce R, Wallwork J. Significance of donor transmitted disease in cardiac transplantation. *J Heart Transplant* 1985; 4:302-6.

Hayakawa F, Imada K, Towatari M, Saito H. Life-threatening human parvovirus B19 infection transmitted by intravenous immune globulin. *Br J Haematol* 2002; 118:1187-9.

Hebert MM, Yu C, Towbin JA, Rogers BB. Fatal Epstein-Barr virus myocarditis in a child with repetitive myocarditis. *Pediatr Pathol Lab Med* 1995; 15:805-12.

Heegaard ED, Eiskjaer H, Baandrup U, Hornsleth A. Parvovirus B19 infection associated with myocarditis following adult cardiac transplantation. *Scand J Infect Dis* 1998; 30:607-10.

Hendrix MG, Salimans MM, van Broen CP, Bruggeman CA. High prevalence of latently present cytomegalovirus in arterial walls of patients suffering from grade III atherosclerosis. *Am J Pathol* 1990; 136:23-8.

Henke A, Launhardt H, Klement K, Stelzner A, Zell R, Munder T. Apoptosis in Coxsackievirus B3-caused diseases: Interaction between the capsid protein VP2 and the proapoptotic protein Siva. *J Virol* 2000; 74:4284-90.

Henke A, Nestler M, Strunze S, et al. The apoptotic capability of Coxsackievirus B3 influenced by the efficient interaction between the capsid protein VP2 and the proapoptotic host protein Siva. *Virology* 2001; 289:15-22.

Hershkowitz A, Wu TC, Willoughby SB, Vlahov D, Ansari AA, Beschorner WE, Baughman KL. Myocarditis and cardiotropic viral infection associated with severe left ventricular dysfunction in late-stage infection with human immunodeficiency virus. *J Am Coll Cardiol* 1994; 24:1025-32.

Higuchi R, Dollinger G, Walsh PS, Griffith R. Simultaneous amplification and detection of specific DNA sequences. *Biotechnology* 1992; 10:413-7.

Hilton DA, Variend S, Pringle JH. Demonstration of Coxsackie virus RNA in formalin-fixed tissue sections from childhood myocarditis cases by *in situ* hybridization and the polymerase chain reaction. *J Pathol* 1993; 170:45-51.

Holland PM, Abramson RD, Watson R, Gelfand DH. Detection of specific polymerase chain reaction product by utilizing the 5' to 3' exonuclease activity of *Thermus aquaticus* DNA polymerase. *PNAS* 1991; 88:7276-80.

Huber SA. Autoimmunity in myocarditis: Relevance of animal models. *Clin Immunol Immunopathol* 1997; 83:93-102.

Huber SA, Gauntt CJ, Sakkinen P. Enteroviruses and myocarditis: Viral pathogenesis through replication, cytokine induction and immunopathogenicity. *Adv Virus Res* 1999; 51:35-80.

Hufnagel G, Pankweit S, Richter A, Schönian U, Maisch B. The European study of epidemiology and treatment of cardiac inflammatory diseases (ESETCID). *Herz* 2000; 25:279-85.

Ito M, Kodama M, Masuko F, et al. Expression of coxsackievirus and adenovirus receptor in hearts of rats with experimental autoimmune myocarditis. *Circ Res* 2000; 86:275-80.

Johansson ES, Niklasson B, Maizel J, Gorbalenya AE, Lindberg AM. Molecular analysis of three Ljungan virus isolates reveals a new, close-to-root lineage of the *Picornaviridae* with a cluster of two unrelated 2A proteins. *J Virol* 2002; 76:8920-30.

Johansson ES, Niklasson B, Tesh RB, Shafren DR, Travassos da Rosa APA, Lindberg AM. Molecular characterization of M1146, an American isolate of Ljungan virus (LV) reveals the presence of a new LV genotype. *J Gen Virol* 2003; 84:837-44.

Johansson ES, Ekström JO, Shafren DR, Frisk G, Hyypiä T, Edman K, Lindberg AM. Cell culture propagation and biochemical analysis of the Ljungan virus prototype strain. *Biochem Biophys Res Comm* 2004; 317:1023-9.

Kannel WB, Dawber TR, Kagan A, Revotskie N, Stokes J 3rd. Factors of risk in the development of coronary heart disease – six years follow-up experience. The Framingham Study. *Ann Intern Med* 1961; 55:33-50.

Karjalainen J, Nieminen MS, Heikkila J. Influenza A 1 myocarditis in conscripts. *Acta Med Scand* 1980; 20:27-30.

Keeling PJ, Jeffrey S, Caforio AL, Taylor R, Bottazzo GF, Davies MJ, McKenna WJ. Similar prevalence of enteroviral genome within the myocardium from patients with idiopathic dilated cardiomyopathy and controls by the polymerase chain reaction. *Br Heart J* 1992; 68:554-9.

Khan G, Kangro HO, Coates PJ, Heath RB. Inhibitory effects of urine on the polymerase chain reaction for cytomegalovirus DNA. *J Clin Pathol* 1991; 44:360-5.

Klein RM, Jiang H, Niederacher D, et al. Frequency and quantity of the parvovirus B19 genome in endomyocardial biopsies from patients with suspected myocarditis or idiopathic left ventricular dysfunction. *Z Kardiol* 2004; 93:300-9.

Klingel K. Molecular biologic detection of virus infection in myocarditis and dilated cardiomyopathy. In: Cooper Jr, Leslie T (Hrsg.). *Myocarditis: From bench to bedside*. Totowa, NJ: Humana Press, 2002:295-324.

Klingel K, Hohenadl C, Canu A, et al. Ongoing enterovirus-induced myocarditis is associated with persistent heart muscle infection: Quantitative analysis of virus replication, tissue damage, and inflammation. *PNAS* 1992; 89:314-8.

Klingel K, Rieger P, Mall G, Selinka HC, Huber M, Kandolf R. Visualization of enteroviral replication in myocardial tissue by ultrastructural in situ hybridization: identification of target cells and cytopathic effects. *Lab Invest* 1998; 78:1227-37.

Kloover JS, Soots AP, Krogerus LA, et al. Rat cytomegalovirus infection in kidney allograft recipients is associated with increased expression of intracellular adhesion molecule-1 vascular adhesion molecule-1, and their ligands leukocyte function antigen-1 and very late antigen-4 in the graft. *Transplantation* 2000; 69:2641-7.

Kochl S, Niederstatter H, Parson W. DNA extraction and quantitation of forensic samples using the phenol-chloroform method and real-time PCR. *Methods Mol Biol* 2004; 297:13-30.

Kok T, Wati S, Bayly B, Devonshire-Gill D, Higgins G. Comparison of six nucleic acid extraction methods for detection of viral DNA or RNA sequences in four different non-serum specimen types. *J Clin Virol* 2000; 16:59-63.

Koskinen PK, Kallio EA, Tikkanen JM, Sihvola RK, Häyry PJ, Lemström KB. Cytomegalovirus infection and cardiac allograft vasculopathy. *Transpl Infect Dis* 1999; 1:115-26.

Kühl U, Strauer BE, Schultheiss HP. Methylprednisolone in chronic myocarditis. Postgrad Med J 1994; 70:734-5.

Kühl U, Pauschinger M, Noutsias M, Kapp JF, Schultheiss HP. Diagnosis and treatment of patients with virus induced inflammatory cardiomyopathy. Eur Heart J Supplements 2002; 4 (Suppl1):173-80.

Kühl U, Pauschinger M, Bock T, et al. Parvovirus B19 infection mimicking acute myocardial infarction. Circulation 2003; 108:945-50.

Kutyavin IG, Afonina IA, Mills A, et al. 3'-Minor groove binder-DNA probes increase sequence specificity at PCR extension temperatures. Nucl Acids Res 2000; 28:655-61.

Kwok S, Higuchi R. Avoiding false positives with PCR. Nature 1989; 399:237-8.

Lamb DJ, Ferns GA. Infection, immunisation and atherosclerosis: Is there a link? Vaccine 1999; 17:559-64.

Lane JR, Neumann DA, Lafond-Walker A, Rose NR. Interleukin 1 or tumor necrosis factor can promote Coxsackie B3-induced myocarditis in resistant B10 A mice. J Exp Med 1992; 175:1123-9.

Larsson S, Söderberg-Naucler C, Wang FZ, Moller E. Cytomegalovirus DNA can be detected in peripheral blood mononuclear cells from all seropositive and most seronegative healthy blood donors over time. Transfusion 1998; 38:271-8.

Latif N, Baker CS, Dunn MJ, et al. Frequency and specificity of antiheart antibodies in patients with dilated cardiomyopathy detected using SDS-PAGE and Western blotting. J Am Coll Cardiol 1993; 22:1378-84.

Lee C, Maull E, Chapman NM, Tracy S, Gauntt C. Genomic regions of Coxsackievirus B3 associated with cardiovirulence. J Med Virol 1997; 52:341-7.

Lee LG, Connell CR, Bloch W. Allelic discrimination by nick-translation PCR with fluorogenic probes. Nucl Acids Res 1993; 21:3761-6.

Leinonen M, Saikku P. Infections and atherosclerosis. Scand Cardiovasc J 2000; 34:12-20.

Leitch AR, Schwarzacher T, Jackson D, Leitch IJ. *In situ*-Hybridisierung. Heidelberg: Spektrum Akademischer Verlag, 1994.

Lenzo JC, Fairweather D, Cull V, Shellam GR, James Lawson CM. Characterisation of murine cytomegalovirus myocarditis: cellular infiltration of the heart and virus persistence. *J Mol Cell Cardiol* 2002; 34:629-40.

Li Y, Peng T, Yang Y, Niu C, Archard LC, Zhang H. High prevalence of enteroviral genomic sequences in myocardium from cases of endemic cardiomyopathy (Keshan disease) in China. *Heart* 2000; 83:696-701.

Li Y, Pan Z, Ji Y, Peng T, Archard LC, Zhang H. Enterovirus replication in valvular tissue from patients with chronic rheumatic heart disease. *Eur Heart J* 2002; 23:567-73.

Lindberg AM, Johansson S. Phylogenetic analysis of Ljungan virus and A-2 plaque virus, new members of the *Picornaviridae*. *Virus Res* 2002; 85:61-70.

Liu P, Aitken K, Kong YY, et al. The tyrosine kinase p56lck is essential in coxsackievirus B3-mediated heart disease. *Nat Med* 2000; 6:429-34.

Liuzzo G, Biasucci LM, Gallimore JR, et al. The prognostic value of C-reactive protein and serum amyloid a protein in severe unstable angina. *N Engl J Med* 1994; 331:417-24.

Livak KJ, Flood JA, Marmaro J, Giusti W, Deetz K. Oligonucleotides with fluorescent dyes at opposite ends provide a quenched probe system useful for detecting PCR product and nucleic acid hybridization. *PCR Methods Appl* 1995; 4:357-62.

Ljungman P, Ribaud P, Eyrich M, et al. Cidofovir for adenovirus infections after allogeneic hematopoietic stem cell transplantation: A survey by the Infectious Diseases Working Party of the European Group for Blood and Marrow Transplantation. *Bone Marrow Transplant* 2003; 31:481-6.

López-Navidad A, Caballero F. Extended criteria for organ acceptance. Strategies for achieving organ safety and for increasing organ pool. *Clin Transplant* 2003; 17:308-24.

Lottspeich F, Zorbas H. Bioanalytik. Heidelberg: Spektrum Akademischer Verlag, 1998.

Lower FE, Menon S, Sanchez JA. Association of parvovirus B19 with plasma cell-rich myocardial infiltrates after heart transplantation. *J Heart Lung Transplant*. 2001; 20:755-8.

Lozinski G, Davis G, Krous H, Billman G, Shimizu H, Burns J. Adenovirus myocarditis: Retrospective diagnosis by gene amplification from formalin-fixed, paraffin-embedded tissues. *Hum Pathol* 1994; 25:831-4.

Luo H, Yanagawa B, Zhang J, et al. Coxsackievirus B3 replication is reduced by inhibition of the extracellular signal-regulated kinase (ERK) signalling pathway. *J Virol* 2002; 76:3365-73.

Madjid M, Aboshady I, Awan I, Litovsky S, Casscells SW. Influenza and cardiovascular disease. Is there a causal relationship? *Tex Heart Inst J* 2004; 31:4-13.

Maier R, Krebs P, Ludewig B. Immunopathological basis of virus-induced myocarditis. *Clin Dev Immunol* 2004; 11:1-5.

Maisch B, Bauer E, Cirsi M, Kochsiek K. Cytolytic cross-reactive antibodies directed against the cardiac membrane and viral proteins in coxsackievirus B3 and B4 myocarditis. Characterization and pathogenetic relevance. *Circulation* 1993; 87 (Suppl 5):IV 49-65.

Maisch B, Camerini F, Schultheiss HP. Immunosuppressive therapy for myocarditis [letter; comment]. *N Engl J Med* 1995; 333: 1713-4.

Maisch B, Portig I, Ristic A, Hufnagel G, Pankuweit S. Definition of inflammatory cardiomyopathy (myocarditis): On the way to consensus. *Herz* 2000; 25:200-9.

Maisch B, Ristic AD, Portig I, Pankuweit S. Human viral cardiomyopathy. *Front Biosci* 2003; 1:39-67.

Martelius T, Salmi M, Wu H, et al. Induction of vascular adhesion protein-1 during liver allograft rejection and concomitant cytomegalovirus infection in rats. *Am J Pathol* 2000; 157: 1229-37.

Martin AB, Webber S, Fricker FJ, et al. Acute myocarditis. Rapid diagnosis by PCR in children. *Circulation* 1994; 90:330-9.

Martino T, Liu P, Petric M, Sole MJ. Enteroviral myocarditis and dilated cardiomyopathy: A review of clinical and experimental studies. In: Rotbart H (Hrsg.) *Human enterovirus infections*. Washington, DC: ASM, 1995:291-352.

Martino T, Petric AM, Brown M, et al. Cardiovirulent coxsackieviruses and the decay-accelerating factor (CD55) receptor. *Virology* 1998; 244:302-14.

Mason JW. Myocarditis and dilated cardiomyopathy: An inflammatory link. *Cardiovasc Res* 2003; 60:5-10.

Mason JW, O'Donnell JB, Herskowitz A, et al. A clinical trial of immunosuppressive therapy for myocarditis. The Myocarditis Treatment Trial Investigators. *N Engl J Med* 1995; 333:269-75.

- Matsumori A**, Yamada T, Suzuki H, Matoba Y, Sasayama S. Increased circulating cytokines in patients with myocarditis and cardiomyopathy. *Br Heart J* 1994; 72:561-6.
- Matsumori A**, Yutani C, Ikeda Y, Kawai S, Sasayama S. Hepatitis C virus from hearts of patients with myocarditis and cardiomyopathy. *Lab Invest* 2000; 80:1137-42.
- McCarthy 3rd RE**, Boehmer JP, Hruban RH, et al. Long-term outcome of fulminant myocarditis as compared with acute (non fulminant) myocarditis. *N Engl J Med* 2000; 342:690-5.
- McMurray JJ**, Stewart S. Epidemiology, aetiology and prognosis of heart failure. *Heart* 2000; 83:596-602.
- McNamara DM**, Di Salvo T, Mathier M, Keck S, Semigran M, Dec GW. Left ventricular dysfunction after heart transplantation: incidence and role of enhanced immunosuppression. *Heart Lung Transplant* 1996;15:506-15.
- McNamara DM**, Rosenblum WD, Janosko KM, et al. Intravenous immune globulin in the therapy of myocarditis and acute cardiomyopathy. *Circulation* 1997; 95:2476-8.
- McNamara DM**, Holubkov R, Starling RC, et al. Controlled trial of intravenous immune globulin in recent-onset dilated cardiomyopathy. *Circulation* 2001; 103:2254-9.
- McNearney T**, Ballard L, Seya T, Atkinson JP. Membrane cofactor protein of complement is present on human fibroblast, epithelial, and endothelial cells. *J Clin Invest* 1989; 84:538-45.
- Meier CR**. The possible role of infections in acute myocardial infarction. *Biomed Pharmacother* 1999; 53:397-404.
- Miura K**, Nakagawa H, Morikawa Y, et al. Epidemiology of idiopathic cardiomyopathy in Japan: Results from a nationwide survey. *Heart* 2002; 87:126-30.
- Modrow S**, Falke D, Truyen U. *Molekulare Virologie*. Heidelberg: Spektrum Akademischer Verlag, 2003.
- Morgan-Capner P**, Richardson PJ, McSorley C, Daley K, Pattison JR. Virus investigation in heart muscle disease. In: Bolte HD (Hrsg.). *Viral heart disease*. Berlin: Springer, 1984: 291-352.
- Morré SA**, Stooker W, Lagrand WK, van den Brule AJC, Niessen HWM. Microorganisms in the aetiology of atherosclerosis. *J Clin Pathol* 2000; 53:647-54.

Muhlestein JB, Horne BD, Carlquist JF, et al. Cytomegalovirus seropositivity and C-reactive protein have independent and combined predictive value for mortality in patients with angiographically demonstrated coronary artery disease. *Circulation* 2000; 102:1917-23.

Mullis KB, Faloona FA. Specific synthesis of DNA in vitro via a polymerase-catalyzed chain reaction. *Methods Enzymol* 1987; 155:335-50.

Naides SJ. Infection with parvovirus B19. *Curr Infect Dis Rep* 1999; 1:273-8.

Newton CR, Graham A. PCR. Heidelberg: Spektrum Akademischer Verlag, 1997.

Ni J, Bowles NE, Kim YH et al. Viral infection of the myocardium in endocardial fibroelastosis. Molecular evidence for the role of mumps virus as an etiologic agent. *Circulation* 1997; 95:133-9.

Nichols WG, Guthrie KA, Corey L, Boeckh M. Influenza infections after hematopoietic stem cell transplantation: risk factors, mortality, and the effect of antiviral therapy. *Clin Infect Dis* 2004;39:1300-6.

Nicholson F, Ajetunmobi JF, Li M, et al. Molecular detection and serotypic analysis of enterovirus RNA in archival specimens from patients with acute myocarditis. *Br Heart J* 1995; 74:522-7.

Nieto FJ. Viruses and atherosclerosis: A critical review of the epidemiologic evidence. *Am Heart J* 1999; 138:S453-60.

Nigro G, Bastiano V, Colloridi V, et al. Human parvovirus B19 infection in infancy associated with acute and chronic lymphocytic myocarditis and high cytokine levels: Report of 3 cases and review. *Clin Infect Dis* 2000; 31:65-9.

Niklasson B, Hörfeldt B, Lundman B. Could myocarditis, insulin-dependent diabetes mellitus and Guillain-Barré syndrome be caused by one or more infectious agents carried by rodents? *Emerg Infect Dis* 1998; 4:187-93.

Niklasson B, Kinnunen L, Hörfeldt B, et al. A new picornavirus isolated from Bank voles (*Clethrionomys glareolus*). *Virology* 1999; 255:86-93.

Niklasson B, Hörfeldt B, Nyholm E, Niedrig M, Donoso Mantke O, Gelderblom HR, Lernmark A. Type 1 diabetes in Swedish bank voles (*Clethrionomys glareolus*): Signs of disease in both colonized and wild cyclic populations at peak density. *Ann NY Acad Sci* 2003; 1005:170-5.

Noutsias M, Fechner H, de Jonge H, et al. Human coxsackievirus-adenovirus receptor is colocalized with integrins alpha(v)beta(3) and alpha(v)beta(5) on the cardiomyocyte sarcolemma and upregulated in dilated cardiomyopathy: Implications for cardiotropic viral infections. *Circulation* 2001; 104:275-80.

Olive DM, Simsek M, Al-Mufti S. Polymerase chain reaction assay for detection of human cytomegalovirus. *J Clin Microbiol* 1989; 27:1238-42.

Opavsky MA, Martino T, Rabinovitch M, et al. Enhanced ERK-1/2 activation in mice susceptible to coxsackievirus-induced myocarditis. *J Clin Invest* 2002; 109:1561-9.

Orth T, Herr W, Spahn T, et al. Human parvovirus B19 infection associated with severe acute perimyocarditis in a 34-year-old man. *Eur Heart J* 1997; 18:524-5.

Osterziel KJ, Scheffold T, Perrot A, Dietz R. Genetik der dilatativen Kardiomyopathie. *Z Kardiol* 2001; 90:461-9.

Osler W. Lectures on angina pectoris and allied states (1897). In: Fye BF (Hrsg.) William Osler's collected papers on the cardiovascular system. New York: Adams, LB, 1985:239-57.

Pankuweit S, Moll R, Baandrup U, Portig I, Hufnagel G, Maisch B. Prevalence of the parvovirus B19 genome in endomyocardial biopsy specimens. *Hum Pathol* 2003; 34:497-500.

Papadogiannakis N, Tolvenstam T, Fischer B, Norbeck O, Brolden K. Active, fulminant, lethal myocarditis associated with parvovirus B19 infection in an infant. *Clin Infect Dis* 2002; 35:1027-31.

Parrillo JE, Cunnion RE, Epstein SE. A prospective, randomized, controlled trial of prednisolon for dilated cardiomyopathy. *N Engl J Med* 1989; 321:1061-8.

Pasch A, Kuepper JH, Wolde A, Kandolf R, Selinka HC. Comparative analysis of virus-host cell interaction of haemagglutinating and non-haemagglutinating strains of coxsackievirus B3. *J Gen Virol* 1999; 80:3153-8.

Pauschinger M, Bowles NE, Fuentes-Garcia FJ, et al. Detection of adenoviral genome in the myocardium of adult patients with idiopathic left ventricular dysfunction. *Circulation* 1999a; 99:1348-54.

Pauschinger M, Dörner A, Kühl U, Schwimmbeck PL, Poller W, Kandolf R, Schultheiss HP. Enteroviral RNA replication in the myocardium of patients with left ventricular dysfunction and clinically suspected myocarditis. *Circulation* 1999b; 99:889-95.

Pellicano R, Oliaro E, Gandolfo N, et al. Ischemic cardiovascular disease and Helicobacter pylori. Where is the link? *Cardiovasc Surg* 2000; 41:829-33.

Pereyra F, Rubin RH. Prevention and treatment of cytomegalovirus infection in solid organ transplant recipients. *Curr Opin Infect Dis* 2004;17:357-61.

Petitjean J, Kopecka H, Freymuth F, et al. Detection of enteroviruses in endomyocardial biopsy by molecular approach. *J Med Virol* 1992; 37:76-82.

Poddar SK. Detection of adenovirus using PCR and molecular beacon. *J Virol Methods* 1999; 82:19-26.

Prösch S, Kimel V, Dawydowa I, Krüger DH. Monitoring of patients for cytomegalovirus after organ transplantation by centrifugation culture and PCR. *J Med Virol* 1992; 38:246-51.

Prösch S, Lienicke U, Priemer C, Flunker G, Seidel WF, Krüger DH, Wauer RR. Human adenovirus and human cytomegalovirus infections in preterm newborns: No association with bronchopulmonary dysplasia. *Pediat Res* 2002; 52:219-24.

Pryzdial EL, Wright JF. Prothrombin assembly on an enveloped virus: Evidence that the cytomegalovirus surface contains procoagulant phospholipid. *Blood* 1994; 84:3749-57.

Pusch D, Oh DY, Wolf S, et al. Detection of enteric viruses and bacterial indicators in German environmental waters. *Arch Virol* 2005 Jan 13; [Epub ahead of print] (www.springerlink.com)

Radonić A, Thulke S, Mackay IA, Landt O, Siegert W, Nitsche A. Guideline to reference gene selection for quantitative real-time PCR. *Biochem Biophys Res Commun* 2004; 313:856-62.

Rahbar AS, Sundqvist VAS, Zweyberg-Wigart B, Grillner L, Söderberg-Naucler C. Recognition of cytomegalovirus clinical isolate antigens by sera from cytomegalovirus-negative blood donors. *Transfusion* 2004; 44:1059-66.

Ray CG, Icenogle TB, Minnich LL, Copeland JG, Grogan TM. The use of intravenous ribavirin to treat influenza virus-associated acute myocarditis. *J Infect Dis* 1989; 159:829-36.

Reetoo KN, Osman SA, Illavia SJ, Cameron-Wilson CL, Banatvala JE, Muir P. Quantitative analysis of viral RNA kinetics in Coxsackievirus-B3-induced murine myocarditis: biphasic pattern of clearance following acute infection, with persistence of residual viral RNA throughout and beyond the inflammatory phase of disease. *J Gen Virol* 2000; 81:2755-62.

Rey L, Lambert V, Wattre P, Andreoletti L. Detection of enteroviruses ribonucleic acid sequences in endomyocardial tissue from adult patients with chronic dilated cardiomyopathy by a rapid RT-PCR and hybridization assay. *J Med Virol* 2001; 64:133-40.

Rich W. Klinische Chemie und Mikroskopie. Berlin: Springer Verlag, 1977.

Richardson P, McKenna W, Bristow M, et al. Report of the 1995 World Health Organization/International Society and Federation of Cardiology Task Force on the definition and classification of cardiomyopathies. *Circulation* 1996; 93:841-2.

Roelvink PW, Lizonova A, Lee JG, et al. The coxsackievirus-adenovirus receptor protein can function as a cellular attachment protein for adenovirus serotypes from subgroups A, C, D, E, and F. *J Virol* 1998; 72:7909-15.

Rose NR. Viral damage or 'molecular mimicry' – placing the blame in myocarditis. *Nat Med* 2000; 6: 631-2.

Ross R. Atherosclerosis is an inflammatory disease. *Am Heart J* 1999; 138:S419-20.

Rotbart HA, Webster AD, et al. Treatment of potentially life-threatening enterovirus infections with pleconaril. *Clin Infect Dis* 2001; 15:228-35.

Ruano G, Pagliaro EM, Schwartz TR, et al. Heat-soaked PCR: An efficient method for DNA amplification with application to forensic analysis. *Biotechniques* 1992; 13:266-74.

Rupprecht HJ, Blankenberg S, Bickel C, et al. Impact of viral and bacterial infectious burden on long-term prognosis in patients with coronary artery disease. *Circulation* 2001; 104:25-31.

Sambrook J, Fritsch EF, Maniatis T. Molecular Cloning: A Laboratory Manual. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, 1989.

Sanger F, Nicklén S, Coulson AR. DNA sequencing with chain-terminating inhibitors. *PNAS* 1977; 74:5463-7.

Savioia M, Oxman M. Myocarditis, pericarditis and mediastinitis. In: Mandell GL, Douglas RG, Bennett JE (Hrsg.). Principles and practice of infectious diseases. New York: Churchill Livingstone, 1990:721-31.

Schettler G, Greten H. Innere Medizin: Verstehen – Lernen – Anwenden. Stuttgart: Thieme Verlag, 1998.

Schmaltz AA, Demel KP, Kallenberg R, Neudorf U, Kandolf R, Klingel K, Bültmann B. Immunosuppressive therapy of chronic myocarditis in children: Three cases and the design of a randomized prospective trial of therapy. *Pediatr Cardiol* 1998; 19:235-9.

Schmidtke M, Selinka HC, Heim A, et al. Attachment of coxsackievirus B3 variants to various cell lines: mapping of phenotypic differences to capsid protein VP1. *Virology* 2000; 275:77-88.

Schönian U, Crombach M, Maser S, Maisch B. Cytomegalovirus-associated heart muscle disease. *Eur Heart J* 1995; 16 (Suppl O):46-9.

Schowengerdt KO, Ni J, Denfield SW, et al. Diagnosis, surveillance, and epidemiologic evaluation of viral infections in pediatric cardiac transplant recipients with the use of the polymerase chain reaction. *J Heart Lung Transplant* 1996; 15:111-23.

Schowengerdt KO, Ni J, Denfield SW, et al. Association of parvovirus B19 genome in children with myocarditis and cardiac allograft rejection: Diagnosis using the polymerase chain reaction. *Circulation* 1997; 96:3549-54.

Schulze K, Schultheiss HP. The role of the ADP/ATP carrier in the pathogenesis of viral heart disease. *Eur Heart J* 1995; 16 (Suppl O):64-7.

Schwaiger A, Umlauft F, Weyrer K, et al. Detection of enteroviral ribonucleic acid in myocardial biopsies from patients with idiopathic dilated cardiomyopathy by polymerase chain reaction. *Am Heart J* 1993; 126:406-10.

Schweiger B, Zadow I, Heckler R, Timm H, Pauli G. Application of a fluorogenic PCR assay for typing and subtyping of Influenza viruses in respiratory samples. *J Clin Microbiol* 2000; 38:1552-8.

Schwimmbeck PL, Badorff C, Schultheiss HP, Strauer BE. Transfer of human myocarditis in the severe combined immunodeficiency mice. *Circ Res* 1994; 75:156-64.

Selinka HC, Wolde A, Pasch A, et al. Comparative analysis of two coxsackievirus B3 strains: Putative influence of virus-receptor interactions on pathogenesis. *J Med Virol* 2002; 67:224-33.

Selinka HC, Wolde A, Sauter M, Kandolf R, Klingel K. Virus-receptor interactions of coxsackie B viruses and their putative influence on cardiotropism. *Med Microbiol Immunol* 2004; 193:127-31.

Shafren D, Bates R, Agrez M, Herd RL, Burns G, Barry R. Coxsackievirus B1, B3 and B5 use decay accelerating factor as a receptor for cell attachment. *J Virol* 1995; 69:3873-7.

Shafren D, Williams DT, Barry R. A decay-accelerating factor-binding strain of coxsackievirus B3 requires the coxsackievirus-adenovirus receptor protein for mediate lytic infection in rhabdomyosarcoma cells. *J Virol* 1997; 71:9844-8.

Shirali GS, Ni J, Chinnock RE, et al. Association of viral genome with graft loss in children after cardiac transplantation. *N Engl J Med* 2001; 344:1498-503.

Shoenfeld Y, Sherer Y, George J, Harats D. Autoantibodies associated with atherosclerosis. *Ann Med* 2000; 32 (Suppl 1):37-40.

Shoenfeld Y, Sherer Y, Harats D. Atherosclerosis as an infectious, inflammatory and autoimmune disease. *Trends Immunol* 2001; 22:293-5.

Smart FW, Naftel DC, Costanzo MR, et al. Risk factors for early, cumulative, and fatal infections after heart transplantation: A multiinstitutional study. *J Heart Lung Transplant* 1996; 15:329-41.

Smith D, Gupta S, Kaski JC. Chronic infections and coronary heart disease. *Int J Clin Pract* 1999; 53:460-6.

Smieja M, Gnarpe J, Lonn E, et al. Multiple infections and subsequent cardiovascular events in the Heart Outcomes Prevention Evaluation (HOPE) Study. *Circulation* 2003; 107:251-7.

Sommer K. Der Mensch: Anatomie – Physiologie – Ontologie. Berlin: Volk und Wissen, 1986.

Speir E, Modali R, Huang ES, et al. Potential role of human cytomegalovirus and p53 interaction in coronary restenosis. *Science* 1994; 265:391-4.

Speir E, Yu ZX, Ferrans VJ, Huang ES, Epstein SE. Aspirin attenuates cytomegalovirus infectivity and gene expression mediated by cyclooxygenase-2 in coronary artery smooth muscle cells. *Circ Res* 1998; 83:210-6.

Staudt A, Schaper F, Stangl V, et al. Immunohistological changes in dilated cardiomyopathy induced by immunoabsorption therapy and subsequent immunoglobulin substitution. *Circulation* 2001; 103:2681-6.

Stouffer GA, Sheahan RG, Lenihan DJ, Patel P. The current status of immune modulating therapy for myocarditis: A case of acute parvovirus myocarditis treated with intravenous immunoglobulin. *Am J Med Sci* 2003; 326:369-74.

Strauer BE, Kandolf R, Mall G, et al. Update 2001: Myocarditis-cardiomyopathy. Med Klin (Munich) 2001; 96:608-25.

Streblow DN, Orloff SL, Nelson JA. The HCMV chemokine receptor US28 is a potential target in vascular disease. Curr Drug Targets Infect Disord 2001; 1:151-8.

Tam PE, Messner RP. Molecular mechanisms of coxsackievirus persistence in chronic inflammatory myopathy: Viral RNA persists through formation of a double-stranded complex without associated genomic mutations or evolution. J Virol 1999; 73:10113-121.

Tanaka K, Zou JP, Takeda K, et al. Effects of human cytomegalovirus immediate-early proteins on p53-mediated apoptosis in coronary artery smooth muscle cells. Circulation 1999; 99:1656-9.

Tennstedt C, Wunschmann S, Schmitz H, Schreiber M. Pathological-anatomical findings after serologic and molecular biologic evidence of Hantaan virus infection. Zentralbl Pathol 1994; 140:173-80.

Thanopoulos BD, Rokas S, Frimas CA, Mantagos SP, Beratis NG. Cardiac involvement in postnatal rubella. Acta Paediatr Scand 1989; 78:141-4.

Tilmann HL. Donor-associated infections in allotransplantation. Tx Med 2002; 14:159-65.

Tomko R, Xu R, Philipson L. HCAR and MCAR: The human and mouse cellular receptors for subgroup C adenoviruses and group B coxsackieviruses. Proc Natl Acad Sci USA 1997; 94: 3352-6.

Tracy S, Chapman NM, Romero J, Ramsingh AI. Genetics of Coxsackievirus B cardiovirulence and inflammatory heart muscle disease. Trends in Microbiology 1996; 4:175-9.

Ueno H, Yokota Y, Shiotani H, et al. Significance of detection of enterovirus RNA in myocardial tissues by reverse transcription-polymerase chain reaction. Int J Cardiol 1995; 51:157-64.

Ulrich R, Meisel H, Schütt M, et al. Verbreitung von Hantavirusinfektionen in Deutschland. Bundesgesundheitsblatt 2004; 47:661-70.

Valentine HA. The role of viruses in cardiac allograft vasculopathy. Am J Transpl 2003; 4:169-77.

van Dam-Mieras MC, Muller AD, van Hinsbergh VW, Mullers WJ, Bomans PH, Bruggeman CA. The procoagulant response of cytomegalovirus infected endothelial cells. Thromb Haemost 1992; 68:364-70.

van Dorp WT, Jonges E, Bruggeman CA, Daha MR, van Es LA, van Der Woude FJ. Direct induction of MHC class I, but not class II, expression on endothelial cells by cytomegalovirus infection. *Transplantation* 1989; 48:469-72.

von Kaisenberg CS, Bender G, Scheewe J, et al. A case of fetal parvovirus B19 myocarditis, terminal cardiac heart failure, and perinatal heart transplantation. *Fetal Diagn Ther* 2001; 16:427-32.

Wang X, Zhang G, Liu F, Han M, Xu D, Zang Y. Prevalence of human parvovirus B19 DNA in cardiac tissue of patients with congenital heart diseases indicated by nested PCR and in situ hybridization. *J Clin Virol* 2004; 31:20-4.

Weill D. Role of cytomegalovirus in cardiac allograft vasculopathy. *Transpl Infect Dis* 2001;3 (Suppl 2):44-8.

Weiss LM, Liu XF, Chang KL, Billingham ME. Detection of enteroviral RNA in idiopathic dilated cardiomyopathy and other human cardiac tissues. *J Clin Invest* 1992; 90:156-9.

Wesslén L, Pahlson C, Friman G, Fohlman J, Lindquist O, Johansson C. Myocarditis caused by *Chlamydia pneumoniae* (TWAR) and sudden unexpected death in Swedish elite orienteer. *Lancet* 1992; 340:427-8.

Wessely R. Coxsackieviral replication and pathogenicity: lessons from gene modified animal models. *Med Microbiol Immunol* 2004; 193:71-4.

Wessely R, Klingel K, Santana LF, et al. Transgenic expression of replication-restricted enteroviral genomes in heart muscle induces defective excitation-contraction coupling and dilated cardiomyopathy. *J Clin Invest* 1998;102:1444-53.

Wick G, Schett G, Amberger A, Kleindienst R, Xu Q. Is atherosclerosis an immunologically mediated disease? *Immunol Today* 1995; 16:27-33.

Wiedbrauk DL, Werner JC, Drevon AM. Inhibition of PCR by aqueous and vitreous fluids. *J Clin Microbiol* 1995; 33:2643-6.

Wierzbicki WB, Hagmeyer KO. *Helicobacter pylori*, *Chlamydia pneumoniae* and cytomegalovirus chronic infections and coronary heart disease. *Pharmacotherapy* 2000; 20:52-63.

Wilfinger WW, Mackey K, Chomczynski P. Effects of pH and ionic strength on the spectrophotometric assessment of nucleic acid purity. *BioTechniques* 1997; 22:474-81.

Wojnicz R, Nowalany-Kozielska E, Wojciechowska C, et al. Randomized, placebo-controlled study for immunosuppressive treatment of inflammatory dilated cardiomyopathy: two-year follow-up results. Circulation 2001; 104:39-45.

Yamada T, Matsumori A, Sasayama S. Therapeutic effect of anti-tumor necrosis factor-alpha antibody on the murine model of viral myocarditis induced by encephalomyocarditis virus. Circulation 1994; 89:846-51.

Ylipaasto P, Klingel K, Lindberg AM, et al. Enterovirus infection in human pancreatic islet cells, islet tropism in vivo and receptor involvement in cultured islet beta cells. Diabetologia 2004; 47:225-39.

Zhou YF, Yu ZX, Wanishsawad C, Shou M, Epstein SE. The immediate early gene products of human cytomegalovirus increase vascular smooth muscle cell migration, proliferation, and expression of PDGF beta-receptor. Biochem Biophys Res Commun 1999; 256:608-13.

Zhu H, Shen Y, Shenk T. Human cytomegalovirus IE1 and IE2 proteins block apoptosis. J Virol 1995; 69:7960-70.

Zhu J, Quyyumi AA, Norman JE, Csako G, Epstein SE. Cytomegalovirus in the pathogenesis of atherosclerosis: the role of inflammation as reflected by elevated C-reactive protein levels. J Am Coll Cardiol 1999; 34:1738-43.

Zhu J, Quyyumi AA, Norman JE, Csako G, Waclawiw MA, Shearer GM, Epstein SE. Effects of total pathogen burden on coronary artery disease risk and C-reactive protein levels. Am J Cardiol 2000; 85:140-6.

Zhu J, Nieto FJ, Horne BD, Anderson JL, Muhlestein JB, Epstein SE. Prospective study of pathogen burden and risk of myocardial infarction or death. Circulation 2001; 103:45-51.