

## Stammzellen und neuartige Zelltherapien

- 1) Dwenger, A., Straßburger, J., and Schwerdtfeger, W. Verordnung (EG) Nr. 1394/2007 über Arzneimittel für neuartige Therapien. Umsetzung in innerstaatliches Recht. *Bundesgesundheitsblatt* 53, 14, 2010.
- 2) Daley, G.Q. Stem cells: roadmap to the clinic. *J Clin Invest* 120, 8.
- 3) Stem Cells: Scientific Progress and Future Research Directions. Department of Health and Human Services, 2001.
- 4) Regenerative Medicine. Department of Health and Human Services, 2006.
- 5) Forsberg, E.C., and Smith-Berdan, S. Parsing the niche code: the molecular mechanisms governing hematopoietic stem cell adhesion and differentiation. *Haematologica* 94, 1477, 2009.
- 6) Holig, K., Kramer, M., Kroschinsky, F., Bornhauser, M., Mengling, T., Schmidt, A.H., Rutt, C., and Ehninger, G. Safety and efficacy of hematopoietic stem cell collection from mobilized peripheral blood in unrelated volunteers: 12 years of single-center experience in 3928 donors. *Blood* 114, 3757, 2009.
- 7) Bonig, H., Wundes, A., Chang, K.H., Lucas, S., and Papayannopoulou, T. Increased numbers of circulating hematopoietic stem/progenitor cells are chronically maintained in patients treated with the CD49d blocking antibody natalizumab. *Blood* 111, 3439, 2008.
- 8) Broxmeyer, H.E., Orschell, C.M., Clapp, D.W., Hangoc, G., Cooper, S., Plett, P.A., Liles, W.C., Li, X., Graham-Evans, B., Campbell, T.B., Calandra, G., Bridger, G., Dale, D.C., and Srour, E.F. Rapid mobilization of murine and human hematopoietic stem and progenitor cells with AMD3100, a CXCR4 antagonist. *J Exp Med* 201, 1307, 2005.
- 9) Bonig, H., Chudziak, D., Priestley, G., and Papayannopoulou, T. Insights into the biology of mobilized hematopoietic stem/progenitor cells through innovative treatment schedules of the CXCR4 antagonist AMD3100. *Exp Hematol* 37, 402, 2009.
- 10) Bonig, H., Watts, K.L., Chang, K.H., Kiern, H.P., and Papayannopoulou, T. Concurrent blockade of alpha4-integrin and CXCR4 in hematopoietic stem/progenitor cell mobilization. *Stem Cells* 27, 836, 2009.
- 11) Ramirez, P., Rettig, M.P., Uy, G.L., Deych, E., Holt, M.S., Ritchey, J.K., and DiPersio, J.F. BIO5192, a small molecule inhibitor of VLA-4, mobilizes hematopoietic stem and progenitor cells. *Blood* 114, 1340, 2009.
- 12) Flomenberg, N., Devine, S.M., Dipersio, J.F., Liesveld, J.L., McCarty, J.M., Rowley, S.D., Vesole, D.H., Badel, K., and Calandra, G. The use of AMD3100 plus G-CSF for autologous hematopoietic progenitor cell mobilization is superior to G-CSF alone. *Blood* 106, 1867, 2005.
- 13) Calandra, G., McCarty, J., McGuirk, J., Tricot, G., Crocker, S.A., Badel, K., Grove, B., Dye, A., and Bridger, G. AMD3100 plus G-CSF can successfully mobilize CD34+ cells from non-Hodgkin's lymphoma, Hodgkin's disease and multiple myeloma patients previously failing mobilization with chemotherapy and/or cytokine treatment: compassionate use data. *Bone Marrow Transplant* 41, 331, 2008.
- 14) Martin-Rendon, E., Bruson, S.J., Hyde, C.J., Stanworth, S.J., Mathur, A., and Watt, S.M. Autologous bone marrow stem cells to treat acute myocardial infarction: a systematic review. *Eur Heart J* 29, 1807, 2008.
- 15) Schachinger, V., Tonn, T., Dimmeler, S., and Zeiher, A.M. Bone-marrow-derived progenitor cell therapy in need of proof of concept: design of the REPAIR-AMI trial. *Nat Clin Pract Cardiovasc Med* 3 Suppl 1, S23, 2006.
- 16) Schachinger, V., Assmus, B., Erbs, S., Elsasser, A., Haberbosch, W., Hambrecht, R., Yu, J., Corti, R., Mathey, D.G., Hamm, C.W., Tonn, T., Dimmeler, S., and Zeiher, A.M. Intracoronary infusion of bone marrow-derived mononuclear cells abrogates adverse left ventricular remodelling post-acute myocardial infarction: insights from the reinfusion of enriched progenitor cells and infarct remodelling in acute myocardial infarction (REPAIR-AMI) trial. *Eur J Heart Fail* 11, 973, 2009.
- 17) Assmus, B., Rolf, A., Erbs, S., Elsasser, A., Haberbosch, W., Hambrecht, R., Tillmanns, H., Yu, J., Corti, R., Mathey, D.G., Hamm, C.W., Suselbeck, T., Tonn, T., Dimmeler, S., Dill, T., Zeiher, A.M., and Schachinger, V. Clinical outcome 2 years after intracoronary administration of bone marrow-derived progenitor cells in acute myocardial infarction. *Circ Heart Fail* 3, 89.
- 18) Erbs, S., Linke, A., Schachinger, V., Assmus, B., Thiele, H., Diederich, K.W., Hoffmann, C., Dimmeler, S., Tonn, T., Hambrecht, R., Zeiher, A.M., and Schuler, G. Restoration of microvascular function in the infarct-related artery by intracoronary

*transplantation of bone marrow progenitor cells in patients with acute myocardial infarction: the Doppler Substudy of the Reinfusion of Enriched Progenitor Cells and Infarct Remodeling in Acute Myocardial Infarction (REPAIR-AMI) trial. Circulation* 116, 366, 2007.

- 19) Beltrami, A.P., Barlucchi, L., Torella, D., Baker, M., Limana, F., Chimenti, S., Kasahara, H., Rota, M., Musso, E., Urbanek, K., Leri, A., Kajstura, J., Nadal-Ginard, B., and Anversa, P. *Adult cardiac stem cells are multipotent and support myocardial regeneration. Cell* 114, 763, 2003.
- 20) Gnechi, M., Zhang, Z., Ni, A., and Dzau, V.J. *Paracrine mechanisms in adult stem cell signaling and therapy. Circ Res* 103, 1204, 2008.
- 21) Seeger, F.H., Tonn, T., Krzossok, N., Zeiher, A.M., and Dimmeler, S. *Cell isolation procedures matter: a comparison of different isolation protocols of bone marrow mononuclear cells used for cell therapy in patients with acute myocardial infarction. Eur Heart J* 28, 766, 2007.
- 22) Assmus B, Tonn T, Seeger FH, Yoon CH, Leistner D, Klotsche J, Schaechinger V, Seifried E, Zeiher AM, and S, D. *Red blood cell contamination of the final cell product impairs the efficacy of autologous bone marrow mononuclear cell therapy. Journal of American College of Cardiology, in Press.*
- 23) Wöhrle, J., Merkle, N., Mailänder, V., Nusser, T., Schauwecker, P., Bommer, M., Wiesneth, M., Schrezenmeier, H., and Hombach, V. *Intracoronary stem cell therapy in patients with acute myocardial infarction – A randomized, double-blind, placebo controlled trial (SCAMI). American Heart Journal, in press.*
- 24) Caplan, A.I. *Mesenchymal stem cells. J Orthop Res* 9, 641, 1991.
- 25) Dominici, M., Le Blanc, K., Mueller, I., Slaper-Cortenbach, I., Marini, F., Krause, D., Deans, R., Keating, A., Prockop, D., and Horwitz, E. *Minimal criteria for defining multipotent mesenchymal stromal cells. The International Society for Cellular Therapy position statement. Cytotherapy* 8, 315, 2006.
- 26) Sensebe, L., Krampera, M., Schrezenmeier, H., Bourin, P., and Giordano, R. *Mesenchymal stem cells for clinical application. Vox Sang*, 2009.
- 27) Bieback, K., Schallmoser, K., Klueter, H., and Strunk, D. *Clinical Protocols for the isolation and expansion of mesenchymal stromal cells. Transfusion Medicine and Hemotherapy* 35, 286, 2008.
- 28) Kern, S., Eichler, H., Stoeve, J., Klueter, H., and Bieback, K. *Comparative analysis of mesenchymal stem cells from bone marrow, umbilical cord blood, or adipose tissue. Stem Cells* 24, 1294, 2006.
- 29) Kocaoemer, A., Kern, S., Klueter, H., and Bieback, K. *Human AB serum and thrombin-activated platelet-rich plasma are suitable alternatives to fetal calf serum for the expansion of mesenchymal stem cells from adipose tissue. Stem Cells* 25, 1270, 2007.
- 30) Schmidtke-Schrezenmeier, G., Urban, M., Sharma, S., Dausend, J., Rojewski, M., Mailänder, V., Rasche, V., Landfester, K., and Schrezenmeier, H. *A promising candidate for cell-labeling to allow studies on in-vivo trafficking of advanced cell therapies by Magnetic Resonance Imaging (MRI). Jahrestagung der Deutschen Gesellschaft für Hämatologie und Onkologie (DGHO), Mannheim, 02.-06.10.2009. Onkologie* 32 (S4): 168 (V604). 2009.