

## 11 Literaturverzeichnis

1. Walter, E. A., P. D. Greenberg, M. J. Gilbert, R. J. Finch, K. S. Watanabe, E. D. Thomas, and S. R. Riddell. 1995. Reconstitution of cellular immunity against cytomegalovirus in recipients of allogeneic bone marrow by transfer of T-cell clones from the donor. *N Engl J Med* 333:1038.
2. Rooney, C. M., C. A. Smith, C. Y. Ng, S. Loftin, C. Li, R. A. Krance, M. K. Brenner, and H. E. Heslop. 1995. Use of gene-modified virus-specific T lymphocytes to control Epstein-Barr-virus-related lymphoproliferation. *Lancet* 345:9.
3. Savoldo, B., H. E. Heslop, and C. M. Rooney. 2000. The use of cytotoxic t cells for the prevention and treatment of epstein-barr virus induced lymphoma in transplant recipients. *Leuk Lymphoma* 39:455.
4. Kolb, H. J., J. Mittermuller, C. Clemm, E. Holler, G. Ledderose, G. Brehm, M. Heim, and W. Wilmanns. 1990. Donor leukocyte transfusions for treatment of recurrent chronic myelogenous leukemia in marrow transplant patients. *Blood* 76:2462.
5. Kolb, H. J., A. Schattenberg, J. M. Goldman, B. Hertenstein, N. Jacobsen, W. Arcese, P. Ljungman, A. Ferrant, L. Verdonck, D. Niederwieser, and et al. 1995. Graft-versus-leukemia effect of donor lymphocyte transfusions in marrow grafted patients. European Group for Blood and Marrow Transplantation Working Party Chronic Leukemia. *Blood* 86:2041.
6. Falkenburg, J. H., A. R. Wafelman, P. Joosten, W. M. Smit, C. A. van Bergen, R. Bongaerts, E. Lurvink, M. van der Hoorn, P. Kluck, J. E. Landegent, H. C. Kluin-Nelemans, W. E. Fibbe, and R. Willemze. 1999. Complete remission of accelerated phase chronic myeloid leukemia by treatment with leukemia-reactive cytotoxic T lymphocytes. *Blood* 94:1201.
7. Renkvist, N., C. Castelli, P. F. Robbins, and G. Parmiani. 2001. A listing of human tumor antigens recognized by T cells. *Cancer Immunol Immunother* 50:3.
8. Rosenberg, S. A., J. R. Yannelli, J. C. Yang, S. L. Topalian, D. J. Schwartzentruber, J. S. Weber, D. R. Parkinson, C. A. Seipp, J. H. Einhorn, and D. E. White. 1994. Treatment of patients with metastatic melanoma with autologous tumor-infiltrating lymphocytes and interleukin 2. *J Natl Cancer Inst* 86:1159.
9. Dudley, M. E., J. R. Wunderlich, P. F. Robbins, J. C. Yang, P. Hwu, D. J. Schwartzentruber, S. L. Topalian, R. Sherry, N. P. Restifo, A. M. Hubicki, M. R. Robinson, M. Raffeld, P. Duray, C. A. Seipp, L. Rogers-Freezer, K. E. Morton, S. A. Mavroukakis, D. E. White, and S. A. Rosenberg. 2002. Cancer regression and autoimmunity in patients after clonal repopulation with antitumor lymphocytes. *Science* 298:850.
10. Yee, C., J. A. Thompson, D. Byrd, S. R. Riddell, P. Roche, E. Celis, and P. D. Greenberg. 2002. Adoptive T cell therapy using antigen-specific CD8+ T cell clones for the treatment of patients with metastatic melanoma: in vivo persistence, migration, and antitumor effect of transferred T cells. *Proc Natl Acad Sci U S A* 99:16168.
11. Melief, C. J., and W. M. Kast. 1995. T-cell immunotherapy of tumors by adoptive transfer of cytotoxic T lymphocytes and by vaccination with minimal essential epitopes. *Immunol Rev* 145:167.
12. Schumacher, T. N. 2002. T-cell-receptor gene therapy. *Nat Rev Immunol* 2:512.
13. Bunnell, B. A., L. M. Muul, R. E. Donahue, R. M. Blaese, and R. A. Morgan. 1995. High-efficiency retroviral-mediated gene transfer into human and nonhuman primate peripheral blood lymphocytes. *Proc Natl Acad Sci U S A* 92:7739.

14. Lam, J. S., M. E. Reeves, R. Cowherd, S. A. Rosenberg, and P. Hwu. 1996. Improved gene transfer into human lymphocytes using retroviruses with the gibbon ape leukemia virus envelope. *Hum Gene Ther* 7:1415.
15. Gladow, M., C. Becker, T. Blankenstein, and W. Uckert. 2000. MLV-10A1 retrovirus pseudotype efficiently transduces primary human CD4+ T lymphocytes. *J Gene Med* 2:409.
16. Uckert, W., C. Becker, M. Gladow, D. Klein, T. Kammertoens, L. Pedersen, and T. Blankenstein. 2000. Efficient gene transfer into primary human CD8+ T lymphocytes by MuLV-10A1 retrovirus pseudotype. *Hum Gene Ther* 11:1005.
17. Engels, B., H. Cam, T. Schuler, S. Indraccolo, M. Gladow, C. Baum, T. Blankenstein, and W. Uckert. 2003. Retroviral vectors for high-level transgene expression in T lymphocytes. *Hum Gene Ther* 14:1155.
18. Tahara, H., K. Fujio, Y. Araki, K. Setoguchi, Y. Misaki, T. Kitamura, and K. Yamamoto. 2003. Reconstitution of CD8(+) T Cells by Retroviral Transfer of the TCR alphabeta-Chain Genes Isolated from a Clonally Expanded P815-Infiltrating Lymphocyte. *J Immunol* 171:2154.
19. Kessels, H. W., M. C. Wolkers, M. D. van den Boom, M. A. van der Valk, and T. N. Schumacher. 2001. Immunotherapy through TCR gene transfer. *Nat Immunol* 2:957.
20. Hekele, A., P. Dall, D. Moritz, W. Wels, B. Groner, P. Herrlich, and H. Ponta. 1996. Growth retardation of tumors by adoptive transfer of cytotoxic T lymphocytes reprogrammed by CD44v6-specific scFv:zeta-chimera. *Int J Cancer* 68:232.
21. Altenschmidt, U., E. Klundt, and B. Groner. 1997. Adoptive transfer of in vitro-targeted, activated T lymphocytes results in total tumor regression. *J Immunol* 159:5509.
22. Eshhar, Z. 1997. Tumor-specific T-bodies: towards clinical application. *Cancer Immunol Immunother* 45:131.
23. Parker, L. L., M. T. Do, J. A. Westwood, J. R. Wunderlich, M. E. Dudley, S. A. Rosenberg, and P. Hwu. 2000. Expansion and characterization of T cells transduced with a chimeric receptor against ovarian cancer. *Hum Gene Ther* 11:2377.
24. Haynes, N. M., M. B. Snook, J. A. Trapani, L. Cerruti, S. M. Jane, M. J. Smyth, and P. K. Darcy. 2001. Redirecting mouse CTL against colon carcinoma: superior signaling efficacy of single-chain variable domain chimeras containing TCR-zeta vs Fc epsilon RI-gamma. *J Immunol* 166:182.
25. Hombach, A., C. Heuser, T. Marquardt, A. Wieczarkiewicz, V. Groneck, C. Pohl, and H. Abken. 2001. CD4+ T cells engrafted with a recombinant immunoreceptor efficiently lyse target cells in a MHC antigen- and Fas-independent fashion. *J Immunol* 167:1090.
26. Hombach, A., C. Heuser, and H. Abken. 2002. The recombinant T cell receptor strategy: insights into structure and function of recombinant immunoreceptors on the way towards an optimal receptor design for cellular immunotherapy. *Curr Gene Ther* 2:211.
27. Theobald, M., J. Biggs, D. Dittmer, A. J. Levine, and L. A. Sherman. 1995. Targeting p53 as a general tumor antigen. *Proc Natl Acad Sci U S A* 92:11993.
28. Lustgarten, J., M. Theobald, C. Labadie, D. LaFace, P. Peterson, M. L. Disis, M. A. Cheever, and L. A. Sherman. 1997. Identification of Her-2/Neu CTL epitopes using double transgenic mice expressing HLA-A2.1 and human CD.8. *Hum Immunol* 52:109.

29. Stanislawski, T., R. H. Voss, C. Lotz, E. Sadovnikova, R. A. Willemse, J. Kuball, T. Ruppert, R. L. Bolhuis, C. J. Mielke, C. Huber, H. J. Stauss, and M. Theobald. 2001. Circumventing tolerance to a human MDM2-derived tumor antigen by TCR gene transfer. *Nat Immunol* 2:962.
30. Sadovnikova, E., L. A. Jopling, K. S. Soo, and H. J. Stauss. 1998. Generation of human tumor-reactive cytotoxic T cells against peptides presented by non-self HLA class I molecules. *Eur J Immunol* 28:193.
31. Liu, X., E. A. Peralta, J. D. Ellenhorn, and D. J. Diamond. 2000. Targeting of human p53-overexpressing tumor cells by an HLA A\*0201-restricted murine T-cell receptor expressed in Jurkat T cells. *Cancer Res* 60:693.
32. Holler, P. D., P. O. Holman, E. V. Shusta, S. O'Herrin, K. D. Wittrup, and D. M. Kranz. 2000. In vitro evolution of a T cell receptor with high affinity for peptide/MHC. *Proc Natl Acad Sci U S A* 97:5387.
33. Kessels, H. W., M. D. van Den Boom, H. Spits, E. Hooijberg, and T. N. Schumacher. 2000. Changing T cell specificity by retroviral T cell receptor display. *Proc Natl Acad Sci U S A* 97:14578.
34. Chames, P., R. A. Willemse, G. Rojas, D. Dieckmann, L. Rem, G. Schuler, R. L. Bolhuis, and H. R. Hoogenboom. 2002. TCR-like human antibodies expressed on human CTLs mediate antibody affinity-dependent cytolytic activity. *J Immunol* 169:1110.
35. Morris, E. C., G. M. Bendle, and H. J. Stauss. 2003. Prospects for immunotherapy of malignant disease. *Clin Exp Immunol* 131:1.
36. Hedrick S., E. F. 1993. *Fundamental Immunology*.
37. Zinkernagel, R. M., and P. C. Doherty. 1997. The discovery of MHC restriction. *Immunol Today* 18:14.
38. Janeway C., T. P., Hunt S., Walport M. 1997. *Immunology*. Spektrum Akademischer Verlag, Heidelberg, Berlin, Oxford.
39. Krangel, M. S. 2003. Gene segment selection in V(D)J recombination: accessibility and beyond. *Nat Immunol* 4:624.
40. Burmeister G., P. A. 1998. *Taschenatlas der Immunologie*. Georg Thieme Verlag, Stuttgart, New York.
41. Oldstone, M. B., M. Nerenberg, P. Southern, J. Price, and H. Lewicki. 1991. Virus infection triggers insulin-dependent diabetes mellitus in a transgenic model: role of anti-self (virus) immune response. *Cell* 65:319.
42. Ohashi, P. S., S. Oehen, K. Buerki, H. Pircher, C. T. Ohashi, B. Odermatt, B. Malissen, R. M. Zinkernagel, and H. Hengartner. 1991. Ablation of "tolerance" and induction of diabetes by virus infection in viral antigen transgenic mice. *Cell* 65:305.
43. von Herrath, M. G., J. Dockter, and M. B. Oldstone. 1994. How virus induces a rapid or slow onset insulin-dependent diabetes mellitus in a transgenic model. *Immunity* 1:231.
44. Liu, G. Y., P. J. Fairchild, R. M. Smith, J. R. Prowle, D. Kioussis, and D. C. Wraith. 1995. Low avidity recognition of self-antigen by T cells permits escape from central tolerance. *Immunity* 3:407.
45. Heiser, A., P. Dahm, D. R. Yancey, M. A. Maurice, D. Boczkowski, S. K. Nair, E. Gilboa, and J. Vieweg. 2000. Human dendritic cells transfected with RNA encoding prostate-specific antigen stimulate prostate-specific CTL responses in vitro. *J Immunol* 164:5508.

46. Ludewig, B., A. F. Ochsenbein, B. Odermatt, D. Paulin, H. Hengartner, and R. M. Zinkernagel. 2000. Immunotherapy with dendritic cells directed against tumor antigens shared with normal host cells results in severe autoimmune disease. *J Exp Med* 191:795.
47. Gilboa, E. 2001. The risk of autoimmunity associated with tumor immunotherapy. *Nat Immunol* 2:789.
48. Bouneaud, C., P. Kourilsky, and P. Bousso. 2000. Impact of negative selection on the T cell repertoire reactive to a self-peptide: a large fraction of T cell clones escapes clonal deletion. *Immunity* 13:829.
49. Walker, L. S., and A. K. Abbas. 2002. The enemy within: keeping self-reactive T cells at bay in the periphery. *Nat Rev Immunol* 2:11.
50. Lohmann, T., R. D. Leslie, and M. Londei. 1996. T cell clones to epitopes of glutamic acid decarboxylase 65 raised from normal subjects and patients with insulin-dependent diabetes. *J Autoimmun* 9:385.
51. Speiser, D. E., R. Miranda, A. Zakarian, M. F. Bachmann, K. McKall-Faienza, B. Odermatt, D. Hanahan, R. M. Zinkernagel, and P. S. Ohashi. 1997. Self antigens expressed by solid tumors Do not efficiently stimulate naive or activated T cells: implications for immunotherapy. *J Exp Med* 186:645.
52. Semana, G., R. Gausling, R. A. Jackson, and D. A. Hafler. 1999. T cell autoreactivity to proinsulin epitopes in diabetic patients and healthy subjects. *J Autoimmun* 12:259.
53. Voehringer, D., C. Blaser, A. B. Grawitz, F. V. Chisari, K. Buerki, and H. Pircher. 2000. Break of T cell ignorance to a viral antigen in the liver induces hepatitis. *J Immunol* 165:2415.
54. Miller, S. D., C. L. Vanderlugt, W. S. Begolka, W. Pao, R. L. Yauch, K. L. Neville, Y. Katz-Levy, A. Carrizosa, and B. S. Kim. 1997. Persistent infection with Theiler's virus leads to CNS autoimmunity via epitope spreading. *Nat Med* 3:1133.
55. Bachmaier, K., N. Neu, L. M. de la Maza, S. Pal, A. Hessel, and J. M. Penninger. 1999. Chlamydia infections and heart disease linked through antigenic mimicry. *Science* 283:1335.
56. Zhao, Z. S., F. Granucci, L. Yeh, P. A. Schaffer, and H. Cantor. 1998. Molecular mimicry by herpes simplex virus-type 1: autoimmune disease after viral infection. *Science* 279:1344.
57. Romero, P., P. R. Dunbar, D. Valmori, M. Pittet, G. S. Ogg, D. Rimoldi, J. L. Chen, D. Lienard, J. C. Cerottini, and V. Cerundolo. 1998. Ex vivo staining of metastatic lymph nodes by class I major histocompatibility complex tetramers reveals high numbers of antigen-experienced tumor-specific cytolytic T lymphocytes. *J Exp Med* 188:1641.
58. Pittet, M. J., D. Valmori, P. R. Dunbar, D. E. Speiser, D. Lienard, F. Lejeune, K. Fleischhauer, V. Cerundolo, J. C. Cerottini, and P. Romero. 1999. High frequencies of naive Melan-A/MART-1-specific CD8(+) T cells in a large proportion of human histocompatibility leukocyte antigen (HLA)-A2 individuals. *J Exp Med* 190:705.
59. Yee, C., P. A. Savage, P. P. Lee, M. M. Davis, and P. D. Greenberg. 1999. Isolation of high avidity melanoma-reactive CTL from heterogeneous populations using peptide-MHC tetramers. *J Immunol* 162:2227.
60. Overwijk, W. W., M. R. Theoret, S. E. Finkelstein, D. R. Surman, L. A. De Jong, F. A. Vyth-Dreese, T. A. Dellemijn, P. A. Antony, P. J. Spiess, D. C. Palmer, D. M. Heimann, C. A. Klebanoff, Z. Yu, L. N. Hwang, L. Feigenbaum, A. M. Kruisbeek, S. A. Rosenberg, and N. P. Restifo. 2003. Tumor Regression and Autoimmunity after

- Reversal of a Functionally Tolerant State of Self-reactive CD8+ T Cells. *J Exp Med* 198:569.
61. Hu, J., W. Kindsvogel, S. Busby, M. C. Bailey, Y. Y. Shi, and P. D. Greenberg. 1993. An evaluation of the potential to use tumor-associated antigens as targets for antitumor T cell therapy using transgenic mice expressing a retroviral tumor antigen in normal lymphoid tissues. *J Exp Med* 177:1681.
62. Vierboom, M. P., H. W. Nijman, R. Offringa, E. I. van der Voort, T. van Hall, L. van den Broek, G. J. Fleuren, P. Kenemans, W. M. Kast, and C. J. Melief. 1997. Tumor eradication by wild-type p53-specific cytotoxic T lymphocytes. *J Exp Med* 186:695.
63. Morgan, D. J., H. T. Kreuwel, S. Fleck, H. I. Levitsky, D. M. Pardoll, and L. A. Sherman. 1998. Activation of low avidity CTL specific for a self epitope results in tumor rejection but not autoimmunity. *J Immunol* 160:643.
64. Ohlen, C., M. Kalos, D. J. Hong, A. C. Shur, and P. D. Greenberg. 2001. Expression of a tolerizing tumor antigen in peripheral tissue does not preclude recovery of high-affinity CD8+ T cells or CTL immunotherapy of tumors expressing the antigen. *J Immunol* 166:2863.
65. Eck, S. C., and L. A. Turka. 2001. Adoptive transfer enables tumor rejection targeted against a self-antigen without the induction of autoimmunity. *Cancer Res* 61:3077.
66. Rosenberg, S. A., and D. E. White. 1996. Vitiligo in patients with melanoma: normal tissue antigens can be targets for cancer immunotherapy. *J Immunother Emphasis Tumor Immunol* 19:81.
67. Padovan, E., G. Casorati, P. Dellabona, S. Meyer, M. Brockhaus, and A. Lanzavecchia. 1993. Expression of two T cell receptor alpha chains: dual receptor T cells. *Science* 262:422.
68. Heath, W. R., F. R. Carbone, P. Bertolino, J. Kelly, S. Cose, and J. F. Miller. 1995. Expression of two T cell receptor alpha chains on the surface of normal murine T cells. *Eur J Immunol* 25:1617.
69. Davodeau, F., M. A. Peyrat, F. Romagne, A. Necker, M. M. Hallet, H. Vie, and M. Bonneville. 1995. Dual T cell receptor beta chain expression on human T lymphocytes. *J Exp Med* 181:1391.
70. Padovan, E., C. Giachino, M. Celli, S. Valitutti, O. Acuto, and A. Lanzavecchia. 1995. Normal T lymphocytes can express two different T cell receptor beta chains: implications for the mechanism of allelic exclusion. *J Exp Med* 181:1587.
71. Sant'Angelo, D. B., P. Cresswell, C. A. Janeway, Jr., and L. K. Denzin. 2001. Maintenance of TCR clonality in T cells expressing genes for two TCR heterodimers. *Proc Natl Acad Sci U S A* 98:6824.
72. Zal, T., S. Weiss, A. Mellor, and B. Stockinger. 1996. Expression of a second receptor rescues self-specific T cells from thymic deletion and allows activation of autoreactive effector function. *Proc Natl Acad Sci U S A* 93:9102.
73. Sarukhan, A., C. Garcia, A. Lanoue, and H. von Boehmer. 1998. Allelic inclusion of T cell receptor alpha genes poses an autoimmune hazard due to low-level expression of autospecific receptors. *Immunity* 8:563.
74. Daniels, M. A., S. L. Schober, K. A. Hogquist, and S. C. Jameson. 1999. Cutting edge: a test of the dominant negative signal model for TCR antagonism. *J Immunol* 162:3761.
75. Girgis, L., M. M. Davis, and B. Fazakas de St Groth. 1999. The avidity spectrum of T cell receptor interactions accounts for T cell anergy in a double transgenic model. *J Exp Med* 189:265.

76. Fossati, G., A. Cooke, R. Q. Papafio, K. Haskins, and B. Stockinger. 1999. Triggering a second T cell receptor on diabetogenic T cells can prevent induction of diabetes. *J Exp Med* 190:577.
77. Dittel, B. N., I. Stefanova, R. N. Germain, and C. A. Janeway, Jr. 1999. Cross-antagonism of a T cell clone expressing two distinct T cell receptors. *Immunity* 11:289.
78. Schrum, A. G., and L. A. Turka. 2002. The proliferative capacity of individual naive CD4(+) T cells is amplified by prolonged T cell antigen receptor triggering. *J Exp Med* 196:793.
79. Blohm, U., E. Roth, K. Brommer, T. Dumrese, F. M. Rosenthal, and H. Pircher. 2002. Lack of effector cell function and altered tetramer binding of tumor-infiltrating lymphocytes. *J Immunol* 169:5522.
80. He, X., C. A. Janeway, Jr., M. Levine, E. Robinson, P. Preston-Hurlburt, C. Viret, and K. Bottomly. 2002. Dual receptor T cells extend the immune repertoire for foreign antigens. *Nat Immunol* 3:127.
81. Yang, W., and H. M. Grey. 2003. Study of the Mechanism of TCR Antagonism Using Dual-TCR-Expressing T Cells. *J Immunol* 170:4532.
82. Viola, A., and A. Lanzavecchia. 1996. T cell activation determined by T cell receptor number and tunable thresholds. *Science* 273:104.
83. Mackay, C. R. 1993. Homing of naive, memory and effector lymphocytes. *Curr Opin Immunol* 5:423.
84. Dranoff, G., E. Jaffee, A. Lazenby, P. Columbek, H. Levitsky, K. Brose, V. Jackson, H. Hamada, D. Pardoll, and R. C. Mulligan. 1993. Vaccination with irradiated tumor cells engineered to secrete murine granulocyte-macrophage colony-stimulating factor stimulates potent, specific, and long-lasting anti-tumor immunity. *Proc Natl Acad Sci U S A* 90:3539.
85. Seliger, B., U. Wollscheid, F. Momburg, T. Blankenstein, and C. Huber. 2001. Characterization of the major histocompatibility complex class I deficiencies in B16 melanoma cells. *Cancer Res* 61:1095.
86. Dobrzanski, M. J., J. B. Reome, and R. W. Dutton. 1999. Therapeutic effects of tumor-reactive type 1 and type 2 CD8+ T cell subpopulations in established pulmonary metastases. *J Immunol* 162:6671.
87. Dobrzanski, M. J., J. B. Reome, and R. W. Dutton. 2001. Immunopotentiating role of IFN-gamma in early and late stages of type 1 CD8 effector cell-mediated tumor rejection. *Clin Immunol* 98:70.
88. Brown, D. M., T. L. Fisher, C. Wei, J. G. Frelinger, and E. M. Lord. 2001. Tumours can act as adjuvants for humoral immunity. *Immunology* 102:486.
89. Schuler, T., and T. Blankenstein. 2003. Cutting edge: CD8(+) effector T cells reject tumors by direct antigen recognition but indirect action on host cells. *J Immunol* 170:4427.
90. Prevost-Blondel, A., C. Zimmermann, C. Stemmer, P. Kulmburg, F. M. Rosenthal, and H. Pircher. 1998. Tumor-infiltrating lymphocytes exhibiting high ex vivo cytolytic activity fail to prevent murine melanoma tumor growth in vivo. *J Immunol* 161:2187.
91. Markowitz, D., S. Goff, and A. Bank. 1988. A safe packaging line for gene transfer: separating viral genes on two different plasmids. *J Virol* 62:1120.

92. Pircher, H., K. Burki, R. Lang, H. Hengartner, and R. M. Zinkernagel. 1989. Tolerance induction in double specific T-cell receptor transgenic mice varies with antigen. *Nature* 342:559.
93. Hogquist, K. A., S. C. Jameson, W. R. Heath, J. L. Howard, M. J. Bevan, and F. R. Carbone. 1994. T cell receptor antagonist peptides induce positive selection. *Cell* 76:17.
94. Correia-Neves, M., C. Waltzinger, J. M. Wurtz, C. Benoist, and D. Mathis. 1999. Amino acids specifying MHC class preference in TCR V alpha 2 regions. *J Immunol* 163:5471.
95. Blanas, E., F. R. Carbone, J. Allison, J. F. Miller, and W. R. Heath. 1996. Induction of autoimmune diabetes by oral administration of autoantigen. *Science* 274:1707.
96. Kurts, C., R. M. Sutherland, G. Davey, M. Li, A. M. Lew, E. Blanas, F. R. Carbone, J. F. Miller, and W. R. Heath. 1999. CD8 T cell ignorance or tolerance to islet antigens depends on antigen dose. *Proc Natl Acad Sci U S A* 96:12703.
97. Kurts, C., W. R. Heath, F. R. Carbone, J. Allison, J. F. Miller, and H. Kosaka. 1996. Constitutive class I-restricted exogenous presentation of self antigens in vivo. *J Exp Med* 184:923.
98. Kurts, C., J. F. Miller, R. M. Subramaniam, F. R. Carbone, and W. R. Heath. 1998. Major histocompatibility complex class I-restricted cross-presentation is biased towards high dose antigens and those released during cellular destruction. *J Exp Med* 188:409.
99. Udaka, K., K. H. Wiesmuller, S. Kienle, G. Jung, and P. Walden. 1996. Self-MHC-restricted peptides recognized by an alloreactive T lymphocyte clone. *J Immunol* 157:670.
100. Schambach, A., H. Wodrich, M. Hildinger, J. Bohne, H. G. Krausslich, and C. Baum. 2000. Context dependence of different modules for posttranscriptional enhancement of gene expression from retroviral vectors. *Mol Ther* 2:435.
101. Hanahan, D. 1983. Studies on transformation of Escherichia coli with plasmids. *J Mol Biol* 166:557.
102. Lyons, A. B. 2000. Analysing cell division in vivo and in vitro using flow cytometric measurement of CFSE dye dilution. *J Immunol Methods* 243:147.
103. Valitutti, S., S. Muller, M. Celli, E. Padovan, and A. Lanzavecchia. 1995. Serial triggering of many T-cell receptors by a few peptide-MHC complexes. *Nature* 375:148.
104. San Jose, E., A. Borroto, F. Niedergang, A. Alcover, and B. Alarcon. 2000. Triggering the TCR complex causes the downregulation of nonengaged receptors by a signal transduction-dependent mechanism. *Immunity* 12:161.
105. Jang, I. K., and H. Gu. 2003. Negative regulation of TCR signaling and T-cell activation by selective protein degradation. *Curr Opin Immunol* 15:315.
106. Stockinger, B., T. Barthlott, and G. Kassiotis. 2001. T cell regulation: a special job or everyone's responsibility? *Nat Immunol* 2:757.
107. Legrand, N., and A. A. Freitas. 2001. CD8+ T lymphocytes in double alpha beta TCR transgenic mice. I. TCR expression and thymus selection in the absence or in the presence of self-antigen. *J Immunol* 167:6150.
108. Terrence, K., C. P. Pavlovich, E. O. Matechak, and B. J. Fowlkes. 2000. Premature expression of T cell receptor (TCR)alphabeta suppresses TCRgammadelta gene rearrangement but permits development of gammadelta lineage T cells. *J Exp Med* 192:537.

109. Robertson, J. M., and B. D. Evavold. 1999. Cutting edge: dueling TCRs: peptide antagonism of CD4+ T cells with dual antigen specificities. *J Immunol* 163:1750.
110. Carbone, F. R., S. J. Sterry, J. Butler, S. Rodda, and M. W. Moore. 1992. T cell receptor alpha-chain pairing determines the specificity of residue 262 within the Kb-restricted, ovalbumin257-264 determinant. *Int Immunol* 4:861.
111. Brandle, D., K. Burki, V. A. Wallace, U. H. Rohrer, T. W. Mak, B. Malissen, H. Hengartner, and H. Pircher. 1991. Involvement of both T cell receptor V alpha and V beta variable region domains and alpha chain junctional region in viral antigen recognition. *Eur J Immunol* 21:2195.
112. Brandle, D., K. Brduscha-Riem, A. C. Hayday, M. J. Owen, H. Hengartner, and H. Pircher. 1995. T cell development and repertoire of mice expressing a single T cell receptor alpha chain. *Eur J Immunol* 25:2650.
113. Yokosuka, T., K. Takase, M. Suzuki, Y. Nakagawa, S. Taki, H. Takahashi, T. Fujisawa, H. Arase, and T. Saito. 2002. Predominant role of T cell receptor (TCR)-alpha chain in forming preimmune TCR repertoire revealed by clonal TCR reconstitution system. *J Exp Med* 195:991.
114. Blankenstein, T., and Z. Qin. 2003. The role of IFN-gamma in tumor transplantation immunity and inhibition of chemical carcinogenesis. *Curr Opin Immunol* 15:148.
115. Becker, C., H. Pohla, B. Frankenberger, T. Schuler, M. Assenmacher, D. J. Schendel, and T. Blankenstein. 2001. Adoptive tumor therapy with T lymphocytes enriched through an IFN-gamma capture assay. *Nat Med* 7:1159.
116. Qin, Z., and T. Blankenstein. 2000. CD4+ T cell-mediated tumor rejection involves inhibition of angiogenesis that is dependent on IFN gamma receptor expression by nonhematopoietic cells. *Immunity* 12:677.
117. Barth, R. J., Jr., J. J. Mule, P. J. Spiess, and S. A. Rosenberg. 1991. Interferon gamma and tumor necrosis factor have a role in tumor regressions mediated by murine CD8+ tumor-infiltrating lymphocytes. *J Exp Med* 173:647.
118. Labrecque, N., L. S. Whitfield, R. Obst, C. Waltzinger, C. Benoist, and D. Mathis. 2001. How much TCR does a T cell need? *Immunity* 15:71.
119. Stotz, S. H., L. Bolliger, F. R. Carbone, and E. Palmer. 1999. T cell receptor (TCR) antagonism without a negative signal: evidence from T cell hybridomas expressing two independent TCRs. *J Exp Med* 189:253.
120. Niedergang, F., A. Dautry-Varsat, and A. Alcover. 1998. Cooperative activation of TCRs by enterotoxin superantigens. *J Immunol* 161:6054.
121. Prevost-Blondel, A., M. Neuenhahn, M. Rawiel, and H. Pircher. 2000. Differential requirement of perforin and IFN-gamma in CD8 T cell-mediated immune responses against B16.F10 melanoma cells expressing a viral antigen. *Eur J Immunol* 30:2507.
122. Qin, Z., J. Schwartzkopff, F. Pradera, T. Kammerloens, B. Seliger, H. Pircher, and T. Blankenstein. 2003. A critical requirement of interferon gamma-mediated angiostasis for tumor rejection by CD8+ T cells. *Cancer Res* 63:4095.
123. Hung, K., R. Hayashi, A. Lafond-Walker, C. Lowenstein, D. Pardoll, and H. Levitsky. 1998. The central role of CD4(+) T cells in the antitumor immune response. *J Exp Med* 188:2357.
124. Mattes, J., M. Hulett, W. Xie, S. Hogan, M. E. Rothenberg, P. Foster, and C. Parish. 2003. Immunotherapy of cytotoxic T cell-resistant tumors by T helper 2 cells: an eotaxin and STAT6-dependent process. *J Exp Med* 197:387.

125. Kurts, C., F. R. Carbone, M. F. Krummel, K. M. Koch, J. F. Miller, and W. R. Heath. 1999. Signalling through CD30 protects against autoimmune diabetes mediated by CD8 T cells. *Nature* 398:341.
126. Kurts, C., I. Klebba, G. M. Davey, K. M. Koch, J. F. Miller, W. R. Heath, and J. Floege. 2001. Kidney protection against autoreactive CD8(+) T cells distinct from immunoprivilege and sequestration. *Kidney Int* 60:664.
127. Kodama, S., W. Kuhtreiber, S. Fujimura, E. A. Dale, and D. L. Faustman. 2003. Islet regeneration during the reversal of autoimmune diabetes in NOD mice. *Science* 302:1223.
128. Dor, Y., J. Brown, O. I. Martinez, and D. A. Melton. 2004. Adult pancreatic beta-cells are formed by self-duplication rather than stem-cell differentiation. *Nature* 429:41.
129. Willemse, R. A., M. E. Weijtens, C. Ronteltap, Z. Eshhar, J. W. Gratama, P. Chames, and R. L. Bolhuis. 2000. Grafting primary human T lymphocytes with cancer-specific chimeric single chain and two chain TCR. *Gene Ther* 7:1369.
130. Heemskerk, M. H., M. Hoogeboom, R. Hagedoorn, M. G. Kester, R. Willemze, and J. H. Falkenburg. 2004. Reprogramming of Virus-specific T Cells into Leukemia-reactive T Cells Using T Cell Receptor Gene Transfer. *J Exp Med* 199:885.
131. Bonini, C., G. Ferrari, S. Verzeletti, P. Servida, E. Zappone, L. Ruggieri, M. Ponzoni, S. Rossini, F. Mavilio, C. Traversari, and C. Bordignon. 1997. HSV-TK gene transfer into donor lymphocytes for control of allogeneic graft-versus-leukemia. *Science* 276:1719.
132. Garbi, N., B. Arnold, S. Gordon, G. J. Hammerling, and R. Ganss. 2004. CpG motifs as proinflammatory factors render autochthonous tumors permissive for infiltration and destruction. *J Immunol* 172:5861.