

- Gammaitoni L, Aglietta M: Differential growth factor requirement of primitive cord blood hematopoietic stem cell for self-renewal and amplification vs proliferation and differentiation. *Leukemia* 1998; 12: 718–727
63. Haylock DN, To LB, Dowse TL, Juttner CA, Simmons PJ: Ex vivo expansion and maturation of peripheral blood CD34+ cells into the myeloid lineage. *Blood* 1992; 80: 1405–1412
64. Ruggieri L, Heimfeld S, Broxmeyer HE: Cytokine-dependent ex vivo expansion of early subsets of CD34+ cord blood myeloid progenitors is enhanced by cord blood plasma, but expansion of the more mature subsets of progenitors is favored. *Blood Cells* 1994; 20: 436–454
65. Szilvassy SJ, Bass MJ, Van Zant G, Grimes B: Organ-selective homing defines engraftment kinetics of murine hematopoietic stem cells and is compromised by ex vivo expansion. *Blood* 1999; 93: 1557–1566
66. Dick JE, Bhatia M, Gan O, Kapp U, Wang JC: Assay of human stem cells by repopulation of NOD/SCID mice. *Stem Cells* 1997; 15 (Suppl 1): 199–203
67. Bonnet D, Bhatia M, Wang JC, Kapp U, Dick JE: Cytokine treatment or accessory cells are required to initiate engraftment of purified primitive human hematopoietic cells transplanted at limiting doses into NOD/SCID mice. *Bone Marrow Transplant* 1999; 23: 203–209
68. Piacibello W, Sanavio F, Garetto L, Severino A, Bergandi D, Ferrario J, Fagioli F, Berger M, Aglietta M: Extensive amplification and self-renewal of human primitive hematopoietic stem cells from cord blood. *Blood* 1997; 89: 2644–2653
69. Piacibello W, Sanavio F, Severino A, Dane A, Gammaitoni L, Fagioli F, Perissinotto E, Cavalloni G, Kollet O, Lapidot T, Aglietta M: Engraftment in nonobese diabetic severe combined immunodeficient mice of human CD34(+) cord blood cells after ex vivo expansion: evidence for the amplification and self-renewal of repopulating stem cells. *Blood* 1999; 93: 3736–3749
70. Bhatia M, Bonnet D, Kapp U, Wang JC, Murdoch B, Dick JE: Quantitative analysis reveals expansion of human hematopoietic repopulating cells after short-term ex vivo culture. *J Exp Med* 1997; 186: 619–624
71. Mobest D, Goan SR, Junghahn I, Winkler J, Fichtner I, Herrmann M, Becker M, de Lima-Hahn E, Henschler R: Differential kinetics of primitive hematopoietic cells assayed in vitro and in vivo during serum-free suspension culture of CD34+ blood progenitor cells. *Stem Cells* 1999; 17: 152–161
72. Albella B, Segovia JC, Guenechea G, Pragnell IB, Bueren JA: Preserved long-term repopulation and differentiation properties of hematopoietic grafts subjected to ex vivo expansion with stem cell factor and interleukin 11. *Transplantation* 1999; 67: 1348–1357
73. Guenechea G, Segovia JC, Albella B, Lamana M, Ramirez M, Regidor C, Fernandez MN, Bueren JA: Delayed engraftment of nonobese diabetic/severe combined immunodeficient mice transplanted with ex vivo-expanded human CD34(+) cord blood cells. *Blood* 1999; 93: 1097–1105
74. Kogler G, Callejas J, Sorg RV, Fischer J, Migliaccio AR, Wernet P: The effect of different thawing methods, growth factor combinations and media on the ex vivo expansion of umbilical cord blood primitive and committed progenitors. *Bone Marrow Transplant* 1998; 21: 233–241
75. Pick M, Nagler A, Grisaru D, Eldor A, Deutsch V: Expansion of megakaryocyte progenitors from human umbilical cord blood using a new two-step separation procedure. *Br J Haematol* 1998; 103: 639–650
76. Engel H, Kaya E, Bald R, Kolhagen H, Grecu O, Schondorf T, Brenne U, Kurbacher CM, Gohring UJ, Kleine M, Mallmann P: Fetal cord blood as an alternative source of hematopoietic progenitor cells: immunophenotype, maternal cell contamination, and ex vivo expansion. *J Hematother* 1999; 8: 141–155
77. Muench MO, Moore MA: Accelerated recovery of peripheral blood cell counts in mice transplanted with in vitro cytokine-expanded hematopoietic progenitors. *Exp Hematol* 1992; 20: 611–618
78. Muench MO, Firpo MT, Moore MA: Bone marrow transplantation with interleukin-1 plus kit-ligand ex vivo expanded bone marrow accelerates hematopoietic reconstitution in mice without the loss of stem cell lineage and proliferative potential. *Blood* 1993; 81: 3463–3473
79. Holyoake TL, Freshney MG, McNair L, Parker AN, McKay PJ, Steward WP, Fitzsimons E, Graham GJ, Pragnell IB: Ex vivo expansion with stem cell factor and interleukin-11 augments both short-term recovery posttransplant and the ability to serially transplant marrow. *Blood* 1996; 87: 4589–4595
80. Ratajczak MZ, Ratajczak J, Machalinski B, Mick R, Gewirtz AM: In vitro and in vivo evidence that ex vivo cytokine priming of donor marrow cells may ameliorate posttransplant thrombocytopenia. *Blood* 1998; 91: 353–359
81. Szilvassy SJ, Weller KP, Chen B, Juttner CA, Tsukamoto A, Hoffman R: Partially differentiated ex vivo expanded cells accelerate hematologic recovery in myeloablated mice transplanted with highly enriched long-term repopulating stem cells. *Blood* 1996; 88: 3642–3653
82. Albella B, Segovia JC, Bueren JA: Does the granulocyte-macrophage colony-forming unit content in ex vivo-expanded grafts predict the recovery of the recipient leukocytes? *Blood* 1997; 90: 464–470
83. Peters SO, Kittler EL, Ramshaw HS, Quesenberry PJ: Ex vivo expansion of murine marrow cells with interleukin-3 (IL-3), IL-6, IL-11, and stem cell factor leads to impaired engraftment in irradiated hosts. *Blood* 1996; 87: 30–37
84. Traycoff CM, Cornetta K, Yoder MC, Davidson A, Srouf EF: Ex vivo expansion of murine hematopoietic progenitor cells generates classes of expanded cells possessing different levels of bone marrow repopulating potential. *Exp Hematol* 1996; 24: 299–306
85. Knobel KM, McNally MA, Berson AE, Rood D, Chen K, Kilinski L, Tran K, Okarma TB, Lebkowski JS: Long-term reconstitution of mice after ex vivo expansion of bone marrow cells: differential activity of cultured bone marrow and enriched stem cell populations. *Exp Hematol* 1994; 22: 1227–1235
86. Tisdale JF, Hanazono Y, Sellers SE, Agricola BA, Metzger ME, Donahue RE, Dunbar CE: Ex vivo expansion of genetically marked rhesus peripheral blood progenitor cells results in diminished long-term repopulating ability. *Blood* 1998; 92: 1131–1141
87. Brandt JE, Bartholomew AM, Fortman JD, Nelson MC, Bruno E, Chen LM, Turian JV, Davis TA, Chute JP, Hoffman R: Ex vivo expansion of autologous bone marrow CD34(+) cells with porcine microvascular endothelial cells results in a graft capable of rescuing lethally irradiated baboons. *Blood* 1999; 94: 106–113
88. Abkowitz JL, Taboada MR, Sabo KM, Shelton GH: The ex vivo expansion of feline marrow cells leads to increased numbers of BFU-E and CFU-GM but a loss of reconstituting ability. *Stem Cells* 1998; 16: 288–293
89. Kurtzberg J, Jarosack J, Martin PL, Driscoll T, Waters-Pick B, Douville J, Howrey R, Goltry KL, Smith AK: Augmentation of umbilical cord blood (UCB) transplantation with ex vivo expanded cells, a phase I trial using the Replicell System. *Cord Blood Special Session* 1999; 94: 571 abstract
90. Brugger W, Heimfeld S, Berenson RJ, Mertelsmann R, Kanz L: Reconstitution of hematopoiesis after high-dose chemotherapy by autologous progenitor cells generated ex vivo. *N Engl J Med* 1995; 333: 283–287