

- (c-mpl ligand) and the effects of gestational age on frequency of colonies. *Br J Haematol* 1996; 92: 23–28
36. Kurtzberg J, Laughlin M, Graham ML, Smith C, Olson JF, Halperin EC, Ciocci G, Carrier C, Stevens CE, Rubinstein P: Placental blood as a source of hematopoietic stem cells for transplantation into unrelated recipients. *N Engl J Med* 1996; 335: 157–165
 37. Gluckman E, Rocha V, Boyer-Chammard A, Locatelli F, Arcese W, Pasquini R, Ortega J, Souillet G, Ferreira E, Laporte JP, Fernandez M, Chastang C: Outcome of cord-blood transplantation from related and unrelated donors. Eurocord Transplant Group and the European Blood and Marrow Transplantation Group. *N Engl J Med* 1997; 337: 373–381
 38. Rubinstein P, Carrier C, Scaradavou A, Kurtzberg J, Adamson J, Migliaccio AR, Berkowitz RL, Cabbad M, Dobrila NL, Taylor PE, Rosenfield RE, Stevens CE: Outcomes among 562 recipients of placental-blood transplants from unrelated donors. *N Engl J Med* 1998; 339: 1565–1577
 39. Locatelli F, Rocha V, Chastang C, Arcese W, Michel G, Abecasis M, Messina C, Ortega J, Badell-Serra I, Plouvier E, Souillet G, Jouet JP, Pasquini R, Ferreira E, Garnier F, Gluckman E: Factors associated with outcome after cord blood transplantation in children with acute leukemia. Eurocord-Cord Blood Transplant Group. *Blood* 1999; 93: 3662–3671
 40. Wagner JE, Rosenthal J, Sweetman R, Shu XO, Davies SM, Ramsay NK, McGlave PB, Sender L, Cairo MS: Successful transplantation of HLA-matched and HLA-mismatched umbilical cord blood from unrelated donors: analysis of engraftment and acute graft-versus-host disease. *Blood* 1996; 88: 795–802
 41. Davies SM, Wagner JE, Shu XO, Blazar BR, Katsanis E, Orchard PJ, Kersey JH, Dusenbery KE, Weisdorf DJ, McGlave PB, Ramsay NK: Unrelated donor bone marrow transplantation for children with acute leukemia. *J Clin Oncol* 1997; 15: 557–565
 42. Balduzzi A, Gooley T, Anasetti C, Sanders JE, Martin PJ, Petersdorf EW, Appelbaum FR, Buckner CD, Matthews D, Storb R *et al.*: Unrelated donor marrow transplantation in children. *Blood* 1995; 86: 3247–3256
 43. To LB, Roberts MM, Haylock DN, Dyson PG, Branford AL, Thorp D, Ho JQ, Dart GW, Horvath N, Davy ML, *et al.*: Comparison of hematological recovery times and supportive care requirements of autologous recovery phase peripheral blood stem cell transplants, autologous bone marrow transplants and allogeneic bone marrow transplants. *Bone Marrow Transplant* 1992; 9: 277–284
 44. Weaver CH, Hazelton B, Birch R, Palmer P, Allen C, Schwartzberg L, West W: An analysis of engraftment kinetics as a function of the CD34 content of peripheral blood progenitor cell collections in 692 patients after the administration of myeloablative chemotherapy. *Blood* 1995; 86: 3961–3969
 45. Scheid C, Draube A, Reiser M, Schulz A, Chemnitz J, Nelles S, Fuchs M, Winter S, Wickramanayake PD, Diehl V, Sohngen D: Using at least 5×10^6 /kg CD34+ cells for autologous stem cell transplantation significantly reduces febrile complications and use of antibiotics after transplantations. *Bone Marrow Transplant* 1999; 23: 1177–1181
 46. Glaspy J, McNiece I, LeMaistre F, Menchaca D, Briddell R, Lill M, Jones R, Tami J, Morstyn G, Brown S, Shpall EJ: Effects of stem cell factor (rhSCF) and filgrastim (rhG-CSF) on mobilization of peripheral blood progenitor cells (PBPC) and on hematological recovery posttransplant: early results from a phase I/II study. Program/Proceedings of the ASCO 1994; 13: 68
 47. Briddell R, Glaspy J, Shpall EJ, LeMaistre F, Menchaca D, McNiece I: Mobilization of myeloid, erythroid and megakaryocyte progenitors by recombinant human stem cell factor (rhSCF) plus Filgrastim (rhG-CSF) in patients with breast cancer. Program/Proceedings of the ASCO 1994; 13: 77
 48. Briddell R, Glaspy J, Shpall EJ, LeMaistre F, Menchaca D, McNiece I: Treatment of breast cancer patients with stem cell factor (rhSCF) and filgrastim (rhG-CSF) mobilizes increased numbers of megakaryocyte progenitors. *Cord Blood* 1994; 22: 683
 49. Feng R, Shimazaki C, Inaba T, Takahashi R, Hirai H, Kikuta T, Sumikuma T, Yamagata N, Ashihara E, Fujita N, Nakagawa M: CD34+/CD41a+ cells best predict platelet recovery after autologous peripheral blood stem cell transplantation. *Bone Marrow Transplant* 1998; 21: 1217–1222
 50. Migliaccio AR, Adamson JW, Rubinstein P, Stevens C: Correlations between progenitor cell dose, likelihood to engraft and time to myeloid engraftment in 79 unrelated placental/cord blood transplants. *Cord Blood* 1997; 25: 830
 51. Capmany G, Querol S, Cancelas JA, Garcia J: Short-term, serum-free, static culture of cord blood-derived CD34+ cells: effects of Flt3-L and MIP-1 alpha on in vitro expansion of hematopoietic progenitor cells. *Haematologica* 1999; 84: 675–682
 52. De Felice L, Di Pucchio T, Mascolo MG, Agostini F, Breccia M, Guglielmi C, Ricciardi MR, Tafuri A, Serenci M, Mandelli F, Arcese W: Flt3LP3 induces the ex-vivo amplification of umbilical cord blood committed progenitors and early stem cells in short-term cultures. *Br J Haematol* 1999; 106: 133–141
 53. van den Oudenrijn S, de Haas M, Calafat J, van der Schoot CE, von dem Borne AE: A combination of megakaryocyte growth and development factor and interleukin-1 is sufficient to culture large numbers of megakaryocytic progenitors and megakaryocytes for transfusion purposes. *Br J Haematol* 1999; 106: 553–563
 54. Giarratana MC, Kobari L, Neildez Nguyen TM, Firat H, Bouchet S, Lopez M, Gorin NC, Thierry D, Douay L: Cell culture bags allow a large extent of ex vivo expansion of LTC-IC and functional mature cells which can subsequently be frozen: interest for a large-scale clinical applications. *Bone Marrow Transplant* 1998; 22: 707–715
 55. Koller MR, Manchel I, Maher RJ, Goltry KL, Armstrong RD, Smith AK: Clinical-scale human umbilical cord blood cell expansion in a novel automated perfusion culture system. *Bone Marrow Transplant* 1998; 21: 653–663
 56. Mobest D, Mertelsmann R, Henschler R: Serum-free ex vivo expansion of CD34(+) hematopoietic progenitor cells. *Biotechnol Bioeng* 1998; 60: 341–347
 57. Paquette RL, Gonzales E, Yoshimura R, Tran L, Choi R, Baldwin G, Slamon DJ, Glaspy J: Ex vivo expansion and differentiation of unselected peripheral blood progenitor cells in serum-free media. *J Hematother* 1998; 7: 481–491
 58. David S, Boiron JM, Dupouy M, Rice A, Vianes I, Duperray V, Reiffers J: Expansion of blood CD34+ cells: committed precursor expansion does not affect immature hematopoietic progenitors. *J Hematother* 1997; 6: 151–158
 59. Ahmed N, Khokher MA, Hassan HT: Cytokine-induced expansion of human CD34+ stem/progenitor and CD34+CD41+ early megakaryocytic marrow cells cultured on normal osteoblasts. *Stem Cells* 1999; 17: 92–99
 60. Breems DA, Blokland EA, Siebel KE, Mayen AE, Engels LJ, Ploemacher RE: Stroma-contact prevents loss of hematopoietic stem cell quality during ex vivo expansion of CD34+ mobilized peripheral blood stem cells. *Blood* 1998; 91: 111–117
 61. Brandt JE, Galy AH, Luens KM, Travis M, Young J, Tong J, Chen S, Davis TA, Lee KP, Chen BP, Tushinski R, Hoffman R: Bone marrow repopulation by human marrow stem cells after long-term expansion culture on a porcine endothelial cell line. *Exp Hematol* 1998; 26: 950–961
 62. Piacibello W, Sanavio F, Garetto L, Severino A, Dane A,