

PERSONAL INFORMATION

Paula Boudewina van Hennik

WORK EXPERIENCE

December 1999–September
2000**Post-doc (fixed-term)**

Institute of Hematology; Erasmus Medical Centre, (Netherlands)

Performing fundamental research on hematopoietic stem cell assays and finishing writing thesis.

July 2001–December 2011

Post-doc/group leader

Sanquin Blood Supply; Division Research (Netherlands)

Performing fundamental research on the molecular mechanisms of hematopoietic stem cell migration.

January 2012–July 2016

Senior clinical assessor

CBG-MEB (Netherlands)

Assessment of marketing authorisation applications, variations, scientific advices, paediatric investigation plans, etc.

August 2016–Present

Alternate CHMP

CBG-MEB (Netherlands)

Represent the Netherlands in the CHMP and contribute to decision making regarding marketing authorisation applications, variations, scientific advices, referrals, etc.

EDUCATION AND TRAINING

September 1991–November
1995**MSc**

Faculty of Medicine, Erasmus University Rotterdam (Netherlands)

Medicine

December 1995–April 2001

PhD

Faculty of Medicine, Erasmus University Rotterdam (Netherlands)

Fundamental research on the validation of human haematopoietic stem cell assays for transplantation and gene therapy.

October 2000–April 2001

None

Faculty of Medicine, Erasmus University Rotterdam (Netherlands)

Medical internships; not finished.

ADDITIONAL INFORMATION

Expertise

Haemato-oncology; oncology; haematopoiesis; cell migration; cell signaling; in vitro and in vivo hematopoietic stem cell assays; cellular and gene therapy products

Publications

1. Breems DA, van Hennik PB, Kusadasi N, Boudewijn A, Cornelissen JJ, Sonneveld P, Ploemacher RE: Individual stem cell quality in leukapheresis products is related to the number of mobilized stem cells. *Blood* 1996;87:5370-5378.

2. Kwekkeboom J, Buurman DE, van Hennik PB, Ploemacher RE, Loos HA, Slaper-Cortenbach IC: Separation of G-CSF-mobilized PBSC transplants by counterflow centrifugal elutriation: modest enrichment of CD34+ cells but no loss of primitive haemopoietic progenitors. *Br J Haematol* 1997;99:47-55.

3. Verstegen MM, van Hennik PB, Terpstra W, van den Bos C, Wielenga JJ, van RN, Ploemacher RE, Wagemaker G, Wognum AW: Transplantation of human umbilical cord blood cells in macrophage-depleted SCID mice: evidence for accessory cell involvement in expansion of immature CD34+CD38-cells. *Blood* 1998;91:1966-1976.
4. van Hennik PB, Verstegen MM, Bierhuizen MF, Limon A, Wognum AW, Cancelas JA, Barquinero J, Ploemacher RE, Wagemaker G: Highly efficient transduction of the green fluorescent protein gene in human umbilical cord blood stem cells capable of cobblestone formation in long-term cultures and multilineage engraftment of immunodeficient mice. *Blood* 1998;92:4013-4022.
5. Preijers FW, van Hennik PB, Schattenberg A, Ruijs P, Ploemacher RE, de WT: Counterflow centrifugation allows addition of appropriate numbers of T cells to allogeneic marrow and blood stem cell grafts to prevent severe GVHD without substantial loss of mature and immature progenitor cells. *Bone Marrow Transplant* 1999;23:1061-1070.
6. van Hennik PB, de Koning AE, Ploemacher RE: Seeding efficiency of primitive human hematopoietic cells in nonobese diabetic/severe combined immune deficiency mice: implications for stem cell frequency assessment. *Blood* 1999;94:3055-3061.
7. van Hennik PB, Breems DA, Kusadasi N, Slaper-Cortenbach IC, van den Berg H, van der Lelie HJ, Schipperus MR, Cornelissen JJ, Ploemacher RE: Stroma-supported progenitor production as a prognostic tool for graft failure following autologous stem cell transplantation. *Br J Haematol* 2000;111:674-684.
8. Voermans C, van Hennik PB, van der Schoot CE: Homing of human hematopoietic stem and progenitor cells: new insights, new challenges? *J Hematother Stem Cell Res* 2001;10:725-738.
9. Oomen SP, van Hennik PB, Antonissen C, Lichtenauer-Kaligis EG, Hofland LJ, Lamberts SW, Lowenberg B, Touw IP: Somatostatin is a selective chemoattractant for primitive (CD34(+)) hematopoietic progenitor cells. *Exp Hematol* 2002;30:116-125.
10. van Hennik PB, Ten Klooster JP, Halstead JR, Voermans C, Anthony EC, Divecha N, and Hordijk PL. The C-terminal domain of Rac1 contains two motifs that control targeting and signaling specificity. *J. Biol. Chem.* 2003; 278: 39166-39175.
11. Nijhara R, van Hennik PB, Gignac ML, Kruhlak MJ, Hordijk PL, Delon J, Shaw S: Rac1 mediates collapse of microvilli on chemokine-activated T lymphocytes. *J Immunol* 2004;173:4985-4993.
12. Nigten J, Breems-de Ridder MC, Erpelinck-Verschueren CA, Nikoloski G, van der Reijden BA, van WS, van Hennik PB, de Witte T, Lowenberg B, Jansen JH: ID1 and ID2 are retinoic acid responsive genes and induce a G0/G1 accumulation in acute promyelocytic leukemia cells. *Leukemia* 2005;19:799-805.
13. van Hennik PB, Hordijk PL: Rho GTPases in hematopoietic cells. *Antioxid Redox Signal* 2005;7:1440-1455.
14. Tijssen MR, van Hennik PB, di SF, Zwaginga JJ, van der Schoot CE, Voermans C: Transplantation of human peripheral blood CD34-positive cells in combination with ex vivo generated megakaryocytes results in fast platelet formation in NOD/SCID mice. *Leukemia* 2008;22:203-208.
15. Abreu JR, Dontje W, Krausz S, de LD, van Hennik PB, van Stalborch AM, Ten Klooster JP, Sanders ME, Reedquist KA, Vervoordeldonk MJ, Hordijk PL, Tak PP: A Rac1 inhibitory peptide suppresses antibody production and paw swelling in the murine collagen-induced arthritis model of rheumatoid arthritis. *Arthritis Res Ther* 2010;12:R2.
16. Geutskens SB, Hordijk PL, van Hennik PB: The chemorepellent slit3 promotes monocyte migration. *J Immunol* 2010;185:7691-7698.
17. Zoughlami Y, Voermans C, Brussen K, van Dort KA, Kootstra NA, Maussang D, Smit MJ, Hordijk PL, van Hennik PB: Regulation of CXCR4 conformation by the small GTPase Rac1: implications for HIV infection. *Blood*. 2012 Mar 1;119(9):2024-2032.
18. Geutskens SB, Andrews WD, van Stalborch AM, Brussen K, Holtrop-de Haan SE, Pamavelas JG, Hordijk PL, van Hennik PB: Control of human hematopoietic stem/progenitor cell migration by the extracellular matrix protein Slit3. *Lab Invest*. 2012 Aug;92(8):1129-39.
19. Nucleophosmin1 is a negative regulator of the small GTPase Rac1. Zoughlami Y, van Stalborch AM, van Hennik PB, Hordijk PL. *PLoS One*. 2013 Jul 16;8(7):e68477.
20. Klamer SE, Kuijk CG, Hordijk PL, van der Schoot CE, von Lindern M, van Hennik PB, Voermans C. BIGH3 modulates adhesion and migration of hematopoietic stem and progenitor cells. *Cell Adh Migr*. 2013 Oct 8;7(5).
21. The European Medicines Agency Review of Brentuximab Vedotin (Adcetris) for the Treatment of Adult Patients With Relapsed or Refractory CD30+ Hodgkin Lymphoma or Systemic Anaplastic Large Cell Lymphoma: Summary of the Scientific Assessment of the Committee for Medicinal Products for

Human Use. Gravanis I, Tzogani K, van Hennik P, de Graeff P, Schmitt P, Mueller-Berghaus J, Salmonson T, Gisselbrecht C, Laane E, Bergmann L, Pignatti F. *Oncologist*. 2016 Jan;21(1):102-9.

Projects

Research grants:

1. Product and Process Development - Cellular Products (project PPO-C-03-007): The role of the chemorepellent Slit and its receptor Roundabout (Robo) in homing and mobilization of hematopoietic stem cells. (1st October 2004 – 1st February 2012)(project-leader: Paula B. van Hennik) (since 1st Jan 2012 no longer involved)
2. NWO-ZonMW/Veni (project 916.56.077): Role of the chemorepellent Slit and its receptor Roundabout (Robo) in the regulation of hematopoietic stem cell migration. (1 October 2004 – 1 October 2007) (Project- leader: Paula B. van Hennik) (finished)
3. LSBR 06.30: Molecular mechanisms of hematopoietic stem cell migration. (15th November 2007 – 15th November 2011)(project-leader: Paula B. van Hennik) (finished)
4. Product and Process Development - Cellular Products (project PPO-C-06-005): Role of adhesion-regulating molecules in homeostatic and regenerative hematopoiesis. (1st August 2007 – 1st August 2011)(project-leaders: Carljin Voermans and Paula B. van Hennik) (finished)
5. Product and Process Development - Cellular Products (project PPO-C-08-023): Regulation of hematopoietic stem cell function by the prion protein. (1st Feb 2009 – 30th Nov 2012)(project-leader: Mar Fernandez-Borja; co-applicant Paula B. van Hennik) (since 1st Jan 2012 no longer involved)

Grants for infrastructure:

1. NWO Medium Size Investment with the title of “Nanoscale analysis of signal transduction in normal and malignant hematopoietic (stem) cells.” on nanoproteomics to allow purchase of the CB1000 (Cell Biosciences, Bexhill-on-Sea, UK) that is designed for protein analysis in very small samples, down to 10^3 cells equivalent. (granted in 2010)(project-leader: Peter Hordijk; co-applicant P.B. van Hennik) (since 1st Jan 2012 no longer involved)

Memberships

Since 1st Jan 2012 I have visited:

1. Annual meeting of American Society of Hematology 2012, Atlanta, Georgia, USA; visitor
2. DIA meeting 2013, Amsterdam, The Netherlands; visitor
3. ECCO meeting 2013, Amsterdam, The Netherlands; visitor
4. EHA 2015, Vienna, Austria; visitor

Other Relevant Information

Observer to the Oncology Working Party.