CURRICULUM VITAE

Name: Ingmar Bruns, MD, PhD

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Email: ingmar.bruns@me.com

Date of birth: August 29th 1974 in Bremen, Germany

Nationality: German, US permanent resident

Languages:

Fluent command of English and German, basic skills in French

Professional experience:

Since 2022/09 Development Head, Hematologic Malignancies, Pfizer Global Product Development

• Oversight over the He

 Oversight over the Hematologic Malignancies Portfolio and Team including Program Leadership and Clinical Leadership

- Member of the Oncology & Rare Disease Leadership Team (GPD-LT) and reporting to the Chief Development Officer
- Overseeing development of the Hematologic Malignancies portfolio
- Governance member for the Oncology Portfolio
- Leading Evaluation of Business Development activities in Hematologic Malignancies/Cell Therapy

2021/11- 2022/09 Senior Vice President, Clinical Development, Pfizer Global Product Development, and Chief Medical Officer Trillium Therapeutics, a Pfizer company

 Member of the Oncology Leadership Team (GPD-LT) and reporting to the Chief Development Officer

2020/11-2021/11 Executive Vice President, Chief Medical Officer, Trillium Therapeutics, Cambridge, MA. USA

- Member of the Executive Team (ET) and reporting to CEO
- Built a clinical development group including clinical development (MDs), pharmacovigilance, regulatory affairs, clinical operations, biostatistics, data management, clinical pharmacology
- Responsible for 7 phase II trials in malignant hematology and solid tumor indications with Trillium's CD47 inhibitors
- Represented clinical function at board of director meetings
- Together with CEO and other executive team members presented Trillium at investor meetings, roadshows, investor conferences
- Successfully contributed to the acquisition of Trillium Therapeutics by Pfizer

2020/01-2020/11 Senior Vice President, Head of Clinical Development, Pieris Pharmaceuticals, Boston, USA and Munich, Germany

 Member of the Executive Leadership Team (ELT) and reporting to CEO

Vice President of Clinical Research and Development, Pieris Pharmaceuticals, 2017/10-2020/01 Boston, USA and Munich, Germany

- Built and managed a clinical development group including clinical development (MDs), project leadership, clinical operations, biostatistics, data management, regulatory affairs, clinical pharmacology (~20 people over 3 levels)
- Responsible for clinical development in 3 key therapeutic areas: Immuno-Oncology, Respiratory Medicine, Non-malignant Hematology
- All therapeutic areas are in clinical stage and currently in phase I and II clinical trials
- Joint steering committee (JSC) member for alliances with Astra-Zeneca and Servier
- Representing clinical development function at board of director meetings
- Together with CEO presents Pieris at investor meetings, roadshows, investor conferences

2013/07-2017/10 Clinical Development Physician Leader and US site representative. Clinical Development, Strategic Business Unit Oncology, Bayer HealthCare Pharmaceuticals, Whippany, NJ, USA

- Responsible for multiple development programs (focus on Immuno-Oncology and Malignant Hematology) from First-in Man (FiM) to registration
- Experience with FDA and EMA regulatory interactions
- Deputy Head of Early Development Oncology with oversight of the US portion of the global team (6 MD/MD-PhD)
- Developed strong KOL and investigator networks for Immuno-Oncology as well as multiple solid tumor and malignant hematology indications
- Representative for large industry-academia partnerships with the BROAD Institute (target discovery to sPoC), MD Anderson Cancer Center, University of Southern California (clinical development)
 - o Scientific review and selection of drug targets and allocation of respective resources
 - Management of partnership together with other Bayer executives and senior faculty at the academic institutions
- Nominated for Leadership Development Fast track by the Pharma executive committee at Bayer and successful participation on leadership development assessment (prerequisite for a vice president/therapeutic area head position)

Adjunct Physician-Scientist, Ruth L. and David S. Gottesman Institute for Stem 2010/09-2016 Cell Biology and Regenerative Medicine, Department of Cell Biology, Albert Einstein College of Medicine, Bronx, New York, USA

- Lead basic research projects in micro-environmental regulation of hematopoietic stem cells
- Developed and implemented novel method of confocal 3Dmicroscopy of bone marrow
- Contributed to several successful NIH grants
- Authored papers in high-impact journals

Attending physician, Department of Hematology, Oncology and Clinical Immunology, Heinrich-Heine University, Duesseldorf, Germany

- Clinically responsible for patients with solid tumors and hematological malignancies
- Focus of bone marrow transplantation (autologous and allogeneic transplantations)

2010/07-2013/07

- Consultant for internal medicine, oncology and hematology on campus for i.e. dermatology department, ophthalmology, orthopaedics, general surgery
- Investigator in multiple industry-sponsored trials throughout (phases I-III) as well as IITs
- Head of laboratory of experimental hematology
- Responsible for cell therapy manufacturing ("Kontrollleiter")
- Responsible for routine diagnostics (molecular biology, flow cytometry)
- Responsible for interdisciplinary tumor board at cancer center

2003/11-2010/07

Clinical fellow and research scientist, Department of Haematology, Oncology and Clinical Immunology, Heinrich Heine University, Duesseldorf, Germany

- Completed fellowship in internal medicine with training in cardiology/angiology, nephrology, rheumatology, gastroenterology, hematology and oncology, endocrinology, emergency medicine and intensive care medicine.
- Extensive training in ultrasound diagnostics
- Completed fellowship in hematology/oncology

Group Leader, Laboratory of Experimental Hematology, Department of Hematology, Oncology and Clinical Immunology, Heinrich Heine University, Duesseldorf, Germany

Education and qualifications:

2010 Board certification in internal medicine, medical oncology and hematology

(Germany)

2003: License to practise Medicine (Germany)

1995 - 2003: Student of Medicine at the Medical University of Luebeck, Germany

1998-2003: Doctoral thesis for the academic degree "Dr. med." (Ph. D. equivalent):

Department of Oncology, Medical Clinic I, Medical University of Luebeck,

Germany "Ifosfamide, Carboplatin and Etoposide combined with 41.8 degrees C Whole Body Hyperthermia for Malignant Pleural Mesothelioma: Preclinical

Investigations and a Clinical Phase II Study"

2002: Intern, Department of Rheumatology and Clinical Immunology, University of Bern,

Switzerland

2001-2002: Intern, Department of Plastic Surgery, Tygerberg Hospital, University of

Stellenbosch, South Africa

1998: Medical School, University of Vienna, Austria

1998-2001: Business Studies, University of Hagen, Germany

1994 – 1995: Social Year at the Johanniter Unfall Hilfe, Oldenburg, Germany as Emergency

Medical Technician (EMT)

Peer Reviewed Grants & Awards:

2010-2013 Recipient of the 2010 American Society of Hematology (ASH)-European

Hematology Association (EHA) research exchange award

2007-2009	"Mechanisms of Myelosuppression in patients with multiple myeloma" by the Forschungskommission, Heinrich-Heine University, Düsseldorf, Germany
2007-2009	"Functional analysis of the receptor of the hypothalamic peptides orexin A and B in CD34+ hematopoietic stem and progenitor cells by the Deutsche Forschungsgemeinschaft (DFG)
2006	"Influence of G-CSF and pegylated G-CSF on human hematopoietic stem and progenitor cells" by the Leukämie-Liga, Düsseldorf, Germany
2008 ongoing	"Molecular signature of CD34+ cell subsets of patients with CML" by the Leukämie-Liga, Düsseldorf, Germany

Bibliography:

Several book chapters and over 30 original articles in peer reviewed journals including BLOOD, Leukemia, Nature, Nature Genetics, Nature Medicine, Cancer Research.

Selected Full length, peer-reviewed publications

- Zohren F, Bruns I, Pechtel S, Schroeder T, Fenk R, Czibere A, Maschmeyer G, Kofahl-Krause D, Niederle N, Heil G, Losem C, Welslau M, Brugger W, Germing U, Kronenwett R, Barth J, Rummel MJ, Haas R, Kobbe G. Prognostic value of circulating Bcl-2/lgH levels in patients with follicular lymphoma receiving first-line immuno-chemotherapy. Blood. 2015. Aug 3. Epub ahead of print.
- **Bruns I***, Lucas D, Pinho S, Ahmed J, Lambert MP, Kunisaki Y, Scheiermann C, Schiff L, Poncz M, Bergman A, Frenette PS. Megakaryocytes regulate haematopoietic stem cell quiescence via CXCL4 secretion. Nat Med. 2014. Nov;20(11):1315-20.
- Kunisaki Y, Bruns I*, Scheiermann C, Ahmed J, Pinho S, Zhang D, Mizoguchi T, Wei Q, Lucas D, Ito K, Mar JC, Bergman A, Frenette PS. Arteriolar niches maintain haematopoietic stem cell quiescence. Nature. 2013 Oct 31;502(7473):637-43.
- Pinho S, Lacombe J, Hanoun M, Mizoguchi T, **Bruns I**, Kunisaki Y, Frenette PS. PDGFRα and CD51 mark human nestin+ sphere-forming mesenchymal stem cells capable of hematopoietic progenitor cell expansion. J Exp Med. 2013 Jul 1;210(7):1351-67.
- Bruns I, Cadeddu RP, Brueckmann I, Fröbel J, Geyh S, Büst S, Fischer JC, Roels F, Wilk CM, Schildberg FA, Hünerlitürkoglu AN, Zilkens C, Jäger M, Steidl U, Zohren F, Fenk R, Kobbe G, Brors B, Czibere A, Schroeder T, Trumpp A, Haas R. Multiple myeloma-related deregulation of bone marrow-derived CD34+ hematopoietic stem and progenitor cells. Blood. 2012 Sep 27;120(13):2620-30.
- Lucas D, **Bruns I**, Battista M, Magnon C, Kunisaki Y, Frenette PS. Norepinephrine reuptake inhibition promotes mobilization in mice: potential impact to rescue low stem cell yields. Blood. 2012 Mar 14.
- Czibere A, Bruns I, Kröger N, Platzbecker U, Lind J, Zohren F, Fenk R, Germing U, Schröder T, Gräf T, Haas R, Kobbe G. 5-Azacytidine for the treatment of patients with acute myeloid leukemia or myelodysplastic syndrome who relapse after allo-SCT: a retrospective analysis. Bone Marrow Transplant. 2010 May; 45(5):872-6.
- Czibere A, **Bruns I**, Junge B, Singh R, Kobbe G, Haas R, Germing U. Low RPS14 expression is common in myelodysplastic syndromes without 5q- aberration and defines a subgroup of patients with prolonged survival. Haematologica. 2009 Oct;94 (10):1453-5.
- Will B, Kawahara M, Luciano JP, Bruns I, Parekh S, Erickson-Miller CL, Aivado M, Verma A,Steidl U Effect of the non-peptide thrombopoietin receptor agonist eltrombopag on bone marrow cells from patients with acute myeloid leukemia and myelodysplastic syndrome.

- Zohren F, Czibere A, Bruns I, Fenk R, Schroeder T, Gräf T, Haas R, Kobbe G Fludarabine, amsacrine, high-dose cytarabine and 12 Gy total body irradiation followed by allogeneic hematopoietic stem cell transplantation is effective in patients with relapsed or high-risk acute lymphoblastic leukemia. Bone Marrow Transplant. 2009 May 11
- Bruns I, Czibere A, Fischer JC, Roels F, Cadeddu RP, Buest S, Bruennert D, Huenerlituerkoglu AN, Stoecklein NH, Singh R, Zerbini LF, Jäger M, Kobbe G, Gattermann N, Kronenwett R, Brors B, Haas R.The hematopoietic stem cell in chronic phase CML is characterized by a transcriptional profile resembling normal myeloid progenitor cells and reflecting loss of quiescence. Leukemia. Epub 2009 Jan 22.
- Bruennert D, Czibere A, Bruns I, Kronenwett R, Gattermann N, Haas R, Neumann F. Early in vivo changes of the transcriptome in Philadelphia chromosome-positive CD34+ cells from patients with chronic myelogenous leukaemia following imatinib therapy. Leukemia. 2008 Dec 4.
- Safaian NN, Czibere A, Bruns I, Fenk R, Reinecke P, Dienst A, Haas R, Kobbe G. Sorafenib (Nexavar) induces molecular remission and regression of extramedullary disease in a patient with FLT3-ITD+ acute myeloid leukemia. Leuk Res. 2009 Feb;33(2):348-50.
- Bruns I, Steidl U, Fischer JC, Czibere A, Kobbe G, Raschke S, Singh R, Fenk R, Rosskopf M, Pechtel S, von Haeseler A, Wernet P, Tenen DG, Haas R, Kronenwett. Pegylated granulocyte colony-stimulating factor mobilizes CD34+ cells with different stem and progenitor subsets and distinct functional properties in comparison with unconjugated granulocyte colony-stimulating factor. Haematologica. 2008 Mar;93(3):347-55.
- Fenk R, Michael M, Zohren F, Graef T, Czibere A, **Bruns I**, Neumann F, Fenk B, Haas R, Kobbe G. Escalation therapy with bortezomib, dexamethasone and bendamustine for patients with relapsed or refractory multiple myeloma.Leuk Lymphoma. 2007 Dec;48(12):2345-51.
- Diaz-Blanco E, Bruns I*, Neumann F, Fischer JC, Graef T, Rosskopf M, Brors B, Pechtel S, Bork S, Koch A, Baer A, Rohr UP, Kobbe G, Haeseler A, Gattermann N, Haas R, Kronenwett R.Molecular signature of CD34(+) hematopoietic stem and progenitor cells of patients with CML in chronic phase. Leukemia. 2007 Mar;21(3):494-504.
- Steidl U, Rosenbauer F, Verhaak RG, Gu X, Ebralidze A, Otu HH, Klippel S, Steidl C, **Bruns I**, Costa DB, Wagner K, Aivado M, Kobbe G, Valk PJ, Passegué E, Libermann TA, Delwel R, Tenen DG.Essential role of Jun family transcription factors in PU.1 knockdown-induced leukemic stem cells. Nat Genet. 2006 Nov;38(11):1269-77.
- Fenk R, Hieronimus N, Steidl U, **Bruns I**, Graef T, Zohren F, Ruf L, Haas R, Kobbe G.Sustained G-CSF plasma levels following administration of pegfilgrastim fasten neutrophil reconstitution after high-dose chemotherapy and autologous blood stem cell transplantation in patients with multiple myeloma. Exp Hematol. 2006 Oct;34(10):1296-302.
- Kuendgen A, Fenk R, Bruns I, Dommach M, Schutte A, Engers R, Hünerlitürkoglu A, Haas R, Kobbe G. Splenic rupture following administration of pegfilgrastim in a patient with multiple myeloma undergoing autologous peripheral blood stem cell transplantation. Bone Marrow Transplant. 2006 Jul;38(1):69-70.
- Bruns I, Steidl U, Kronenwett R, Fenk R, Graef T, Rohr UP, Neumann F, Fischer J, Scheid C, Hübel K, Haas R, Kobbe G. A single dose of 6 or 12 mg of pegfilgrastim for peripheral blood progenitor cell mobilization results in similar yields of CD34+ progenitors in patients with multiple myeloma. Transfusion. 2006 Feb;46(2):180-5.
- **Bruns I**, Fox F, Reinecke P, Kobbe G, Kronenwett R, Jung G, Haas R.Complete remission in a patient with relapsed angioimmunoblastic T-cell lymphoma following treatment with bevacizumab.Leukemia. 2005 Nov;19(11):1993-5.
- Steidl U, Fenk R, Bruns I, Neumann F, Kondakci M, Hoyer B, Gräf T, Rohr UP, Bork S, Kronenwett R, Haas R, Kobbe G. Successful transplantation of peripheral blood stem cells mobilized by chemotherapy and a single dose of pegylated G-CSF in patients with multiple myeloma.Bone Marrow Transplant. 2005 Jan;35(1):33-6.
 *equal contribution as first author

Invited reviews, book chapters

- Kobbe G, Bruns I, Fenk R, Czibere A, Haas R. Pegfilgrastim for PBSC mobilization and autologous haematopoietic SCT. Bone Marrow Transplant. 2009 May; 43(9):669-77
- Giebel B, Bruns I. Self-renewal versus differentiation in hematopoietic stem and progenitor cells: a focus on asymmetric cell divisions. Curr Stem Cell Res Ther. 2008 Jan; 3 (1): 9-16. Review
- "Therapeutic Use of Circulating Peripheral Blood Stem Cells" in "Progresses and Challenges in Transfusion Medicine, Hemostasis and Hemotherapy. State of the Art 2008" by R.E. Scharf, Karger
- Haas R, **Bruns I**, Kobbe G, Fenk R. High-dose therapy and autologous peripheral blood stem cell transplantation in patients with multiple myeloma. Recent Results Cancer Res. 2011;183:207-38.