



<u>Current Position</u>: Full Professor of Hematology, SSD MED/15 "Blood Diseases", Head of Chair of Hematology, Dpt. of Clinical and Experimental Sciences, University of Brescia and Director of Unit " Blood Diseases and Bone Marrow Transplantation", Department of Oncology, ASST-Spedali Civili of Brescia <u>PhD awarded less than 10 Years ago</u>: No

#### Scientific Profile:

M.D. at the University of Bologna (1982). Residency training in Hematology (1985) and Postdoctoral Researcher (1989) at the Institute of Hematology "L. e A. Seràgnoli" of Bologna University. Research Fellow at the Laboratory of Cellular Kinetic, Hotel Dieu Hospital, Paris (1991-1993). General Secretary (1994-96) and Advisor of the Italian Society of Experimental Hematology (1997-1999). Assistant Professor at the Chair of Hematology of Udine University, from 1990 to 2001. Professor of Oncology, University of Udine from 1994 to 1997. Associate Professor of Hematology at the University of Brescia from 2001 to 2011. Full Professor of Hematology from 2011 to present. Head of Blood Diseases and Bone Marrow Transplantation Unit at the "Spedali Civili" Hospital of Brescia, from 2004. Director of the Fellowship School of Haematology, University of Brescia, since 2004 to present. Official Member of the Research Council, University of Brescia from 2007 to 2010. Scientific Secretary of the Italian Cooperative Study Group on Chronic Myeloid Leukemia, 1984-2000, and Member of the GIMEMA CML-WP. From 2014, Director of Traslational Genomic, Molecular Biology and Cell Regenerative Section of CREA Laboratory at ASST Spedali Civili of Brescia. From 2019, Director of Program of Cell Therapies and Research in Hematology, ASST Spedali Civili of Brescia. From 2020, Coordinator of PhD in Artificial Intelligence in Medicine and Innovation in Clinical Research and Methodology, Author of more than 400 peer reviewed scientific articles.

Main Areas of Scientific Interest: chronic myeloid leukemia; acute leukemias; antitumor drugs; mechanisms of multidrug resistance; autologous and allogeneic bone marrow transplantation, translational molecular biology and genomics of acute and chronic leukemias, CAR-T cell therapy, regenerative medicine.

Several years of experience in research projects. P.I. role in several research projects including PRIN and international projects, in the field of oncohaematological diseases.

Scientific Responsible of Research Unit for the following projects of relevant national interest, co-funded by the Ministry of University and Scientific and Technological Research: PRIN 1998; PRIN 1999, 2000, 2001, 2003; 2007; 2009; 2015; FCB 2017/19; Unibs HEALTH WELTH 2016/18, FIRB 2001.

- 2010: Prospective study of the interaction between innate and adaptive immunity in the pathogenesis of Gaft versus Host Disease in patients undergoing Allogeneic HSC Transplantation.

For the Lombardy Region Research Project:

- Adult stem cell transplantation for cell replacement, reparative and regenerative therapy" DDG  $n^\circ$  7917 10/7/2006
- Responsible of the Health&Wealth Project funded by University of Brescia: Development of a 3D skin model consisting of a biocompatible hydrogel polymer scaffold engineered with human mesenchymal stem cells with or without fibroblasts, keratinocytes, and lymphocytes for the repair of skin lesions

# **Bibliometric Indicators:**

# Publications 444; # Citations 7192; H index 42; H Index (5 y) 18

# 3 most relevant publications:

- Cavo M et al. Lancet 2010, "GIMEMA Italian Myeloma Network. Bortezomib with thalidomide plus dexamethasone compared with thalidomide plus dexamethasone as induction therapy before, and consolidation therapy after, double autologous stem-cell transplantation in newly diagnosed multiple myeloma: a randomised phase 3 study". doi: 10.1016/S0140-6736(10)61424-9
- Russo D, Malagola M, Skert C, Cancelli V, Turri D, Pregno P, Bergamaschi M, Fogli M, Testoni N, De Vivo A, Castagnetti F, Pungolino E, Stagno F, Breccia M, Martino B, Intermesoli T, Cambrin GR, Nicolini G, Abruzzese E, Tiribelli M, Bigazzi C, Usala E, Russo S, Russo-Rossi A, Lunghi M, Bocchia M, D'Emilio A, Santini V, Girasoli M, Lorenzo RD, Bernardi S, Palma AD, Cesana BM, Soverini S, Martinelli G, Rosti G, Baccarani M. Managing chronic myeloid leukaemia in the elderly with intermittent imatinib treatment. Blood Cancer J. 2015 Sep 18;5:e347.
- Kröger N, Solano C, Wolschke C, Bandini G, Patriarca F, Pini M, Nagler A, Selleri C, Risitano A, Messina G, Bethge W, Pérez de Oteiza J, Duarte R, Carella AM, Cimminiello M, Guidi S, Finke J, Mordini N, Ferra C, Sierra J, Russo D, Petrini M, Milone G, Benedetti F, Heinzelmann M, Pastore D, Jurado M, Terruzzi E, Narni F, Völp A, Ayuk F, Ruutu T, Bonifazi F.Antilymphocyte Globulin for Prevention of Chronic Graft-versus-Host Disease. N Engl J Med. 2016 Jan 7;374(1):43-53

GOLDEN PARAGRAP



## Scientific Responsible of Research Unit. P.I. role.

- Research project, PRIN 1998 -1999-2000-2001-2003-2007-2009
- Research Project, FIRB 2001 "Signal inhibitors in the therapy of Ph+ leukemias".

# ROLE IN THE PROJECT

- Research Project, FCB 2017-2019 Development of a 3D cell culture model based on biocompatible polymeric scaffolds engineered with human mesenchymal stem cells (hMSCs) for cartilage and bone regenerative therapy"
- Research Project, Health and Wealth 2016-2018- "SKINFOLD: Development of a 3D skin model consisting of a biocompatible hydrogel polymer scaffold engineered with human mesenchymal stem cells with or without fibroblasts, keratinocytes, and lymphocytes for the repair of skin lesions"

# WORK EXPERIENCE

# 2020 - Current

Coordinator of PhD in Atificial Intelligence in medicine and Innovation in Clinical Research and Methodology

University of Brescia

Sector: Research and training

# 2019 - Current

Director of Program of Cell Therapies and Research in Hematology

ASST-Spedali Civili of Brescia

Sector: Health sector

## 2014 - Current

Director of Translational Genomic, Molecular Biology and Cell Regenerative Section

CREA Laboratory at ASST-Spedali Civili of Brescia

Sector: Research and training

# 2011 - Current

Full professor

Head of Chair of Hematology, Dpt. of Clinical and Experimental Sciences, University of Brescia

Sector: Research and training

# 2004 - Current

Director of the School of Specialization in Hematology

University of Brescia

Sector: Research and training

# 2004 - Current

Director of the Unit of "Blood Diseases and Bone Marrow Transplantation"

Department of Oncology, ASST-Spedali Civili of Brescia

Sector: health sector

# 1984 - Current

Scientific Secretary of the Italian Cooperative Study Group on Chronic Myeloid Leukemia, 1984-2000, and Member of the

GIMEMA CML-WP

# <u>2001 – 2010</u>

 $\label{professor} {\sf Professor}\, {\sf Associate}, {\sf Head}\, {\sf of}\, {\sf Chair}\, {\sf of}\, {\sf Hematology},\, {\sf Dpt}\, {\sf of}\, {\sf Medical}\, {\sf and}\, {\sf Surgical}\, {\sf Sciences}$ 

University of Brescia Medical School

Sector: Research and training

# <u> 1995 – 1997</u>

Secretary of the Italian Society of Experimental Hematology (SIES)

# <u> 1994 – 1997</u>

Professor of Oncology

University of Udine Medical School, Italy

Sector: Research and training



## 1991 - 1993

Fellowship in Hematology, Laboratory of Cellular Kinetics

Hotel Dieu Hospital, University of Paris (VI), Paris, France

#### 1990 - 2000

Advisor of the Italian Society of Experimental Hematology (SIES)

#### 1990 - 2001

Assistant Professor, Chair and Division of Hematology, Dpt. of Medical and Morphological Research and Dpt. of Bone Marrow Transplantation

University Hospital of Udine Medical School

# <u> 1985 - 1989</u>

Postdoctoral Researcher

Institute of Hematology "L.and A. Seràgnoli", University of Bologna

#### **EDUCATION AND TRAINING**

### 30/06/1989

# PhD in Clinical Hematology

Institute of Hematology "L.and A. Seràgnoli", University of Bologna, Italy

## 05/071985

# Specialist in Clinical Hematology and Laboratory

University of Bologna

Main subject: Clinical Hematology and laboratory

## 20/02/1982

# Master Degree Summa cum Laude

University of Bologna

# PERSONAL SKILLS

Coordination and administration of people, projects and budgets

- Member (Effective) of PhD Board at the University of Bologna and then at the University of Brescia
- Organization and Relator to several National and International Congresses
- Head of Research Unit in National Research Projects (PRIN) in 1998; 1999;2000;2001; 2007; 2009; 2015; Research Project, FIRB 2001; Research Project, FCB 2017-2019; Research Project, Health and Wealth 2016-2018
- General Secretary of the Italian Society of Experimental Hematology from 1995 to 1997
- Advisor of the Italian Society of Experimental Hematology from 1997 to 2000
- Member of the Scientific Secretary of the Italian Co-operator Group for the Study of the chronic myeloid leukemia/GIMEMA CML WP from 1984 to present.
- Member of the Editorial Board Journal: Case Report in Hematology, Journal of Clinical -Medicine, International of Molecular Sciences, MDPI Hemato Editorial.
- Guest Editor of Special Issues in the following Journals: Materials; Journal of Clinical Medicine; Frontiers in Oncology-Section Hematology.

# ADDITIONAL INFORMATION

Most relevant publicatio ns in the last 10 Years

- Rambaldi A et al. Lancet Oncol. 2015. Busulfan plus cyclophosphamide versus busulfan plus fludarabine as a preparative regimen for allogeneic haemopoietic stem-cell transplantation in patients with acute myeloid leukaemia: an open-label, multicentre, randomised, phase 3 trial.

  Nov;16(15):1525-36.
- Beelen DW et al. Lancet Haematol. 2019 "Treosulfan or busulfan plus fludarabine as conditioning treatment before allogeneic haemopoietic stem cell transplantation for older patients with acute myeloid leukaemia or myelodysplastic syndrome (MC-FludT.14/L): a randomised, non-inferiority, phase 3 trial". Oct 9. pii: S2352-3026(19)30157-7. doi: 10.1016/S2352-3026(19)30157-7.
- Malagola M, Cancelli V, Skert C, Leali PF, Ferrari E, Tiburzi A, Sala ML, Donnini I, Chiusolo P, Muffetti A, Battista M, Turra A, Cattina F, Rambaldi B, Schieppati F, Polverelli N, Bernardi S, Perucca S, Marini M, Laszlo D, Savignano C, Patriarca F, Corradini P, Piccirillo N, Sica S, Bosi A, Russo D.



- Extracorporeal Photopheresis for Treatment of Acute and Chronic Graft Versus Host Disease: An Italian Multicentric Retrospective Analysis on 94 Patients on Behalf of the Gruppo Italiano Trapianto di Midollo Osseo. Transplantation. 2016 Dec;100(12):e147-e155
- Malagola M, Skert C, Borlenghi E, Chiarini M, Cattaneo C, Morello E, Cancelli V, Cattina F, Cerqui E, Pagani C, Passi A, Ribolla R, Bernardi S, Giustini V, Lamorgese C, Ruggeri G, Imberti L, Caimi L, Russo D, Rossi G. Postremission sequential monitoring of minimal residual disease by WT1 Q-PCR and multiparametric flow cytometry assessment predicts relapse and may help to address risk-adapted therapy in acute myeloid leukemia patients. Cancer Med. 2016 Feb;5(2):265-74.
- Bernardi S, Malagola M, Zanaglio C, Polverelli N, Dereli Eke E, D'Adda M, Farina M, Bucelli C, Scaffidi L, Toffoletti E, Deambrogi C, Stagno F, Bergamaschi M, Franceschini L, Abruzzese E, Divona MD, Gobbi M, Di Raimondo F, Gaidano G, Tiribelli M, Bonifacio M, Cattaneo C, Iurlo A, Russo D. Digital PCR improves the quantitation of DMR and the selection of CML candidates to TKIs discontinuation. Cancer Med. 2019 May;8(5):2041-2055. doi: 10.1002/cam4.2087. Epub 2019 Apr 4. PubMed PMID: 30950237; PubMed Central PMCID: PMC6536984
- Polverelli N, Tura P, Battipaglia G, Malagola M, Bernardi S, Gandolfi L, Zollner T, Zanaglio C, Farina M, Morello E, Turra A, Mohty M, Russo D.

  "Multidimensional geriatric assessment for elderly hematological patients (≥60 years) submitted to allogeneic stem cell transplantation. A FrenchItalian 10-year experience on 228 patients." Bone Marrow Transplant. 2020 May 12. doi: 10.1038/s41409-020-0934-1.
- Malagola M, Bernardi S, Polverelli N, Russo D. Minimal residual disease monitoring in acute myeloid leukaemia: are we ready to move from bone marrow to peripheral blood?" Br J Haematol. 2020 Jul;190(2):135-136. doi: 10.1111/bjh.16579. Epub 2020 Mar 19.
- Russo D, Garcia-Gutierrez JV, Soverini S, Baccarani M. "Chronic Myeloid Leukemia Prognosis and Therapy: Criticisms and Perspectives." J Clin Med. 2020 Jun 2;9(6):1709. doi: 10.3390/jcm9061709.
- Re F, Sartore L, Moulisova V, Cantini M, Almici C, Bianchetti A, Chinello C, Dey K, Agnelli S, Manferdini C, Bernardi S, Lopomo NF, Sardini E, Borsani E, Rodella LF, Savoldi F, Paganelli C, Guizzi P, Lisignoli G, Magni F, Salmeron-Sanchez M, Russo D. 3D gelatin-chitosan hybrid hydrogels combined with human platelet lysate highly support human mesenchymal stem cell proliferation and osteogenic differentiation. J Tissue Eng. 2019 May 2; 10:2041731419845852. doi: 10.1177/2041731419845852.
- Re F, Gabusi E, Manferdini C, Russo D, Lisignoli G. Bone Regeneration Improves with Mesenchymal Stem Cell Derived Extracellular Vesicles (EVs) Combined with Scaffolds: A Systematic Review. Biology (Basel). 2021 Jun 24;10(7):579. doi: 10.3390/biology10070579. PMID: 34202598; PMCID: PMC8301056.

# Projects/G rants

- Research project, PRIN 1998 "Modulation of toxicity and resistance to anthracyclines: preclinical study of the effects of anthracyclines, multidrug resistance reversal agents and amifostine, in normal and leukemic cells".
- Research project, PRIN 1999 "Ph chromosome and alpha-interferon: developments in the therapy of chronic myeloid leukemia".
- Research Project, PRIN 2000 "Biological aspects and innovative therapies in acute myeloid leukemia of the elderly".
- Research Project, PRIN 2001 "In vivo and in vitro study of the tyrosine kinase inhibitor (STI571), alone or in combination with interferon-α or the farmesyl transferase inhibitor (SCH 66336), in patients with Ph+ chronic myeloid leukemia in accelerated and blastic phase"
- Research Project, FIRB 2001 "Signal inhibitors in the therapy of Ph+ leukemias".
- Research Project, PRIN 2003 "Preclinical and clinical studies of tyrosine kinase (TK) alterations and therapeutic effects of TK inhibitors in chronic myelod leukemia (CML) and related syndromes".
- Research Project, PRIN 2007 Pharmacogenomic/cytokine pattern and clinical effects of 5-Azacitidine in the treatment of Myelodysplastic Syndromes (MDS)
- Research Project, PRIN 2009 "Intermittent administration of Imatinib (InterIM) in patients with Philadelphia-positive chronic myeloid leukemia (CML-Ph+) in stable cytogenetic response. Clinical and Biological Effects on the Ph+ Clone."
- Research Project, PRIN 2015 "Genetic and Epigenetic Implications of Phospholipase C beta1, miRNas and Mutation Analysis in Myelodysplastic Syndromes: Impact on Pathogenetic Mechanisms and Therapy"
- Research Project, FCB 2017-2019 Development of a 3D cell culture model based on biocompatible polymeric scaffolds engineered with human mesenchymal stem cells (hMSCs) for cartilage and bone regenerative therapy"
- Research Project, Health and Wealth 2016-2018- "SKINFOLD: Development of a 3D skin model consisting of a biocompatible hydrogel polymer scaffold engineered with human mesenchymal stem cells with or without fibroblasts, keratinocytes, and lymphocytes for the repair of skin lesions"

# **Patents**

- Sartore L., Russo D., Guizzi P., Dey K., Salmeron-Sanchez M., Borsani E.; "Tridimensional bioactive porous body for bone tissue regeneration and process for its preparation" PCT/IB2021/056112 (8 July 2021)
- Sartore L., Russo D., Pandini S., Nicolai P., Ferrari M., Gilbert R., Irish J.; "Integrated core-shell bioactive structure for the regeneration of bone and osteochondral tissues" PCT/IB2021/056113 (8 July 2021)

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Brescia, 8/9/23

