



Cesarina Giallongo, Ph.D

Address: Division of Hematology, AOU Policlinico "G.Rodolico-San Marco", 95123, Catania, Italy

Telephone: +39-095-3781943

e-mail: cesarina.giallongo@unict.it

Nationality: Italian

Date of birth: 15/11/1982

ORCID: 0000-0002-7667-6088; **Scopus Author ID:** 24480914100; **ResearcherID:** j-7225-2016

CURRENT POSITION

Assistant professor

Department of Medical, Surgical sciences and advanced technologies "G.F. Ingrassia"; Section of Hematology; University of Catania; Catania, Italy – Office contact: +39 095 3781943

Education

- 2017: Ph.D. program in Basic and Applied Biomedical Sciences, Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy
- 2011: Specialist in Clinical Biochemistry, University of Messina, Messina, Italy
- 2006: Master degree in Sanitary Biology, University of Catania, Catania, Italy
- 2004: Bachelor degree in Biological Sciences, University of Catania, Catania, Italy

Work experience

- 2006-2011: Research Fellowship – Azienda ospedaliera Vittorio Emanuele, Division of Hematology; University of Catania; Catania, Italy
- 2011-2013: Research Fellowship - Department of Clinical and Molecular Biomedicine; Section of Hematology; University of Catania; Catania, Italy
- 2014-2017: Ph.D. student - Department of Biomedical and Biotechnological Sciences, University of Catania; Catania, Italy
- 2017-2020: Research Fellowship - AUO Policlinico Vittorio Emanuele, Section of Hematology; University of Catania; Catania, Italy
- 2020-today: Assistant Professor - Department of Medical, Surgical Sciences and advanced technologies "G.F. Ingrassia"; Section of Hematology; University of Catania; Catania, Italy
- Teacher of Hematology at the Postgraduate School of Hematology

Research interests

Dr. Giallongo's research is concerned primarily with the role of tumor microenvironment in the pathogenesis and progression of hematological malignancies. Within this context, she has

investigated tumor-induced immunosuppressive mechanisms, cytokine networks and metabolic changes of tumor microenvironment. She has evaluated the complex crosstalk between mesenchymal stromal cells (MSCs), myeloid derived suppressor cells and leukemic cells. Ongoing research projects include the mitochondria transfer between microenvironment cells and myeloma plasma cells as potential mechanism that induces chemoresistance improving mitochondrial fitness of tumor cells.

Awards and Honors

- November 2019: Under40 in Hematology 2019 (Best poster). Title of the project: “Inhibition of TLR4 signaling overcomes bortezomib resistance in myeloma”.
- November 2022: Top 5 of USERN (Universal Scientific Education and Research Network) 2022 in the field of Medical Science. Title of the project “Epigenetic and metabolic reprogramming of mesenchymal stromal cells in myelodysplastic syndromes and acute myeloid leukemia”.

Selected Lectures

- “Incontro Annuale delle U. O. di Ematologia e Centri Trapianto dell’Italia Meridionale e Insulare”; title of presentation: “L’imatinib aumenta la citotossicità del melfalan e la loro combinazione migliora il killing delle cellule leucemiche umane”; Matera, 10 November 2009.
- "Ragionando di leucemia mieloide cronica: ricercatori italiani a confronto"; title of presentation: "Ruolo delle cellule mieloide soppressorie nella leucemia mieloide cronica"; Catania, 11 July 2013.
- Oral communication 45° congress of Società italiana di Ematologia (SIE); title of presentation: "Le cellule staminali mesenchimali (MSC) dei pazienti con leucemia mieloide cronica regolano l’attivazione delle cellule mieloidi soppressorie di tipo granulocitario"; Firenze, 6 October 2015.
- "Under 40 in hematology-giovani ematologi a confronto"; title of presentation: “Granulocyte-like myeloid derived suppressor cells (G-MDSC) are increased in multiple myeloma and are driven by dysfunctional mesenchymal stem cells (MSC)”; Villafranca di Verona (VR), 12 November 2015.
- “Novel Insights in Biology of Myeloma: seed and soil”; title of presentation: “Role of microenvironment in immune escape mechanisms in multiple myeloma”; 11 February 2017.
- “In vivo modelling of hematological malignancies: from bench to bedside”; title of presentation: “Mesenchymal stromal cells drive tumor microenvironment transformation in hematological malignancies”; Catania, 31 January-1 February 2020.
- “Novel translational approaches hematological malignancies: from bench to bedside”; title of presentation: “Interplay between metabolism and epigenetics in tumor reprogramming on mesenchymal stromal cells in myelodysplastic syndrome”; Catania, 6 November 2021.
- Oral Communication 8h ESH conference on MYELODYSPLASTIC SYNDROMES; title of presentation: “Interplay between inflammation and epigenetics in tumor reprogramming of mesenchymal stromal cells (MSCs) in myelodysplastic syndromes (MDS)”; 7 April 2022. Virtual event.
- Big Faculty member of “SOHO ITALY- Clinical and Biological School of Acute Leukemia”; Rome, 28-29 June 2022.
- Big Faculty member of “SOHO ITALY- Annual Conference”; Rome, 23-26 October 2022.

Memberships

- From 2012 member of “Società di Ematologia Sperimentale” (SIES)
- From 2013 to 2014 member junior of “European Hematology Association” (EHA)
- From 2017 member of “Società Italiana di Ematologia” (SIE)

Editorial activity

Editorial board in: *Frontiers in Physiology*; *Experimental Pharmacology and Drug Discovery*.

Conference organization

- Member of Organizing Committee of “In vivo modelling of hematological malignancies: from bench to bedside”; Catania, 31 January-1 February 2020.
- Member of Organizing Committee of “Novel translational approaches hematological malignancies: from bench to bedside”; Catania, 5-6 November 2021.

Documented international collaborations

- Prof. Roberto Motterlini, Director of Research (DR1), INSERM U955, University Paris Est Créteil, France
- Prof. Victoriano Mulero, Departamento de Biología Celular e Histología, Facultad de Biología, Universidad de MurciaIMIB-Arrixaca, Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER), Murcia, 30100, Spain.

Publications

Total number of publications in peer-review journals (Scopus): 68

Total number of citations (Scopus): 1411

H index (Scopus): 22

1. Longhitano L, Giallongo S, Orlando L, Broggi G, Longo A, Russo A, Caltabiano R, Giallongo C, Barbagallo I, Di Rosa M, Giuffrida R, Parenti R, Li Volti G, Vicario N, Tibullo D. **Lactate Rewrites the Metabolic Reprogramming of Uveal Melanoma Cells and Induces Quiescence Phenotype.** *Int J Mol Sci.* 2022 Dec 20;24(1):24. doi: 10.3390/ijms24010024. PMID: 36613471
2. Duminuco A, Nardo A, Garibaldi B, Vetro C, Longo A, Giallongo C, Di Raimondo F, Palumbo GA. **Prediction of Survival and Prognosis Migration from Gold-Standard Scores in Myelofibrosis Patients Treated with Ruxolitinib Applying the RR6 Prognostic Model in a Monocentric Real-Life Setting.** *J Clin Med.* 2022 Dec 14;11(24):7418. doi: 10.3390/jcm11247418. PMID: 36556033
3. Giallongo S, Longhitano L, Denaro S, D'Aprile S, Torrisi F, La Spina E, Giallongo C, Mannino G, Lo Furno D, Zappalà A, Giuffrida R, Parenti R, Li Volti G, Tibullo D, Vicario N. **The Role of Epigenetics in Neuroinflammatory-Driven Diseases.** *Int J Mol Sci.* 2022 Dec 2;23(23):15218. doi:10.3390/ijms232315218. PMID: 36499544
4. Carota G, Distefano A, Spampinato M, Giallongo C, Broggi G, Longhitano L, Palumbo GA, Parenti R, Caltabiano R, Giallongo S, Di Rosa M, Polosa R, Bramanti V, Vicario N, Li Volti G, Tibullo D. **Neuroprotective Role of α -Lipoic Acid in Iron-Overload-Mediated Toxicity and Inflammation in In Vitro and In Vivo Models.** *Antioxidants (Basel).* 2022 Aug 18;11(8):1596.
5. Castrogiovanni P, Barbagallo I, Imbesi R, Musumeci G, Sanfilippo C, Broggi G, Caltabiano R, Tibullo D, Giallongo C, Forte S, Li Volti G, Di Rosa M. **Chitinase domain containing 1 increase is associated with low survival rate and M0 macrophages infiltrates in colorectal cancer patients.** *Pathol Res Pract.* 2022 Jul 22;237:154038.
6. Longhitano L, Vicario N, Forte S, Giallongo C, Broggi G, Caltabiano R, Barbagallo GMV, Altieri R, Raciti G, Di Rosa M, Caruso M, Parenti R, Liso A, Busi F, Lolicato M, Mione MC, Li Volti G, Tibullo D. **Lactate modulates microglia polarization via IGFBP6 expression and remodels tumor microenvironment in glioblastoma.** *Cancer Immunol Immunother.* 2022 Jun 3. doi: 10.1007/s00262-022-03215-3.

7. Longhitano L, Vicario N, Tibullo D, Giallongo C, Broggi G, Caltabiano R, Barbagallo GMV, Altieri R, Baghini M, Di Rosa M, Parenti R, Giordano A, Mione MC, Li Volti G. **Lactate Induces the Expressions of MCT1 and HCAR1 to Promote Tumor Growth and Progression in Glioblastoma.** *Front Oncol.* 2022 Apr 28;12:871798.
8. Romano A, Parrinello NL, Barchitta M, Manuele R, Puglisi F, Maugeri A, Barbato A, Triolo AM, Giallongo C, Tibullo D, La Ferla L, Botta C, Siragusa S, Iacobello C, Montineri A, Volti GL, Agodi A, Palumbo GA, Di Raimondo F. **In-vitro NET-osis induced by COVID-19 sera is associated to severe clinical course in not vaccinated patients and immune-dysregulation in breakthrough infection.** *Sci Rep.* 2022 May 4;12(1):7237.
9. Liso A, Venuto S, Coda ARD, Giallongo C, Palumbo GA, Tibullo D. **IGFBP-6: At the Crossroads of Immunity, Tissue Repair and Fibrosis.** *Int J Mol Sci.* 2022 Apr 14;23(8):4358.
10. Scandura G, Giallongo C, Puglisi F, Romano A, Parrinello NL, Zuppelli T, Longhitano L, Giallongo S, Di Rosa M, Musumeci G, Motterlini R, Foresti R, Palumbo GA, Li Volti G, Di Raimondo F, Tibullo D. **TLR4 Signaling and Heme Oxygenase-1/Carbon Monoxide Pathway Crosstalk Induces Resiliency of Myeloma Plasma Cells to Bortezomib Treatment.** *Antioxidants (Basel).* 2022 Apr 12;11(4):767.
11. Giallongo C, Dulcamare I, Tibullo D, Del Fabro V, Vicario N, Parrinello N, Romano A, Scandura G, Lazzarino G, Conticello C, Li Volti G, Amorini AM, Musumeci G, Di Rosa M, Polito F, Oteri R, Aguenouz M, Parenti R, Di Raimondo F, Palumbo GA. **CXCL12/CXCR4 axis supports mitochondrial trafficking in tumor myeloma microenvironment.** *Oncogenesis.* 2022 Jan 21;11(1):6. doi: 10.1038/s41389-022-00380-z.
12. Maugeri G, D'Amico AG, Giunta S, Giallongo C, Tibullo D, Bucolo C, Saccone S, Federico C, Scollo D, Longo A, Avitabile T, Musumeci G, D'Agata V. **Activity-Dependent Neuroprotective Protein (ADNP)-Derived Peptide (NAP) Counteracts UV-B Radiation-Induced ROS Formation in Corneal Epithelium.** *Antioxidants (Basel).* 2022 Jan 7;11(1):128. doi: 10.3390/antiox11010128.
13. Caruso M, Emma R, Distefano A, Rust S, Poulas K, Zadjali F, Giordano A, Volarevic V, Mesiakaris K, Al Tobi M, Boffo S, Arsenijevic A, Zuccarello P, Giallongo C, Ferrante M, Polosa R, Li Volti G; Replica Project Group. **Electronic nicotine delivery systems exhibit reduced bronchial epithelial cells toxicity compared to cigarette: the Replica Project.** *Sci Rep.* 2021 Dec 17;11(1):24182. doi: 10.1038/s41598-021-03310-y.
14. Longhitano L, Tibullo D, Vicario N, Giallongo C, La Spina E, Romano A, Lombardo S, Moretti M, Masia F, Coda ARD, Venuto S, Fontana P, Parenti R, Li Volti G, Di Rosa M, Palumbo GA, Liso A. **IGFBP-6/sonic hedgehog/TLR4 signalling axis drives bone marrow fibrotic transformation in primary myelofibrosis.** *Aging (Albany NY).* 2021 Dec 14;13(23):25055-25071. doi: 10.18632/aging.203779.
15. Vicario N, Spitale FM, Tibullo D, Giallongo C, Amorini AM, Scandura G, Spoto G, Saab MW, D'Aprile S, Alberghina C, Mangione R, Bernstock JD, Botta C, Gulisano M, Buratti E, Leanza G, Zorec R, Vecchio M, Di Rosa M, Li Volti G, Lazzarino G, Parenti R, Gulino R. **Clobetasol promotes neuromuscular plasticity in mice after motoneuronal loss via sonic hedgehog signaling, immunomodulation and metabolic rebalancing.** *Cell Death Dis.* 2021 Jun 16;12(7):625. doi: 10.1038/s41419-021-03907-1.
16. Spampinato M, Giallongo C, Romano A, Longhitano L, La Spina E, Avola R, Scandura G, Dulcamare I, Bramanti V, Di Rosa M, Vicario N, Parenti R, Li Volti G, Tibullo D, Palumbo GA. **Focus on Osteosclerotic Progression in Primary Myelofibrosis.** *Biomolecules.* 2021 Jan 19;11(1):122. doi: 10.3390/biom11010122.
17. Barbato A, Scandura G, Puglisi F, Cambria D, La Spina E, Palumbo GA, Lazzarino G, Tibullo D, Di Raimondo F, Giallongo C, Romano A. **Mitochondrial Bioenergetics at the Onset of Drug Resistance in Hematological Malignancies: An Overview.** *Front Oncol.* 2020 Dec 21;10:604143. doi: 10.3389/fonc.2020.604143. eCollection 2020.
18. Camiolo G, Barbato A, Giallongo C, Vicario N, Romano A, Parrinello NL, Parenti R, Sandoval JC, García-Moreno D, Lazzarino G, Avola R, Palumbo GA, Mulero V, Li Volti G,

- Tibullo D, Di Raimondo F. **Iron regulates myeloma cell/macrophage interaction and drives resistance to bortezomib.** *Redox Biol.* 2020 Sep;36:101611. doi: 10.1016/j.redox.2020.101611. Epub 2020 Jun 24.
19. Anfuso CD, Longo A, Distefano A, Amorini AM, Salmeri M, Zanghì G, Giallongo C, Giurdanella G, Lupo G. **Uveal Melanoma Cells Elicit Retinal Pericyte Phenotypical and Biochemical Changes in an in Vitro Model of Coculture.** *Int J Mol Sci.* 2020 Aug 3;21(15):5557. doi: 10.3390/ijms21155557.
 20. Longhitano L, Li Volti G, Giallongo C, Spampinato M, Barbagallo I, Di Rosa M, Romano A, Avola R, Tibullo D, Palumbo GA. **The Role of Inflammation and Inflammasome in Myeloproliferative Disease.** *J Clin Med.* 2020 Jul 22;9(8):2334. doi: 10.3390/jcm9082334.
 21. Giallongo C, Tibullo D, Puglisi F, Barbato A, Vicario N, Cambria D, Parrinello NL, Romano A, Conticello C, Forte S, Parenti R, Amorini AM, Lazzarino G, Li Volti G, Palumbo GA, Di Raimondo F. **Inhibition of TLR4 Signaling Affects Mitochondrial Fitness and Overcomes Bortezomib Resistance in Myeloma Plasma Cells.** *Cancers (Basel).* 2020 Jul 22;12(8):1999. doi: 10.3390/cancers12081999.
 22. Puglisi F, Parrinello NL, Giallongo C, Cambria D, Camiolo G, Bellofiore C, Conticello C, Del Fabro V, Leotta V, Markovic U, Sapienza G, Barbato A, Scalese S, Tibullo D, Brundo MV, Palumbo GA, Di Raimondo F, Romano A. **Plasticity of High-Density Neutrophils in Multiple Myeloma is Associated with Increased Autophagy Via STAT3.** *Int J Mol Sci.* 2019 Jul 19;20(14):3548. doi: 10.3390/ijms20143548.
 23. Longhitano L, Tibullo D, Giallongo C, Lazzarino G, Tartaglia N, Galimberti S, Li Volti G, Palumbo GA, Liso A. **Proteasome Inhibitors as a Possible Therapy for SARS-CoV-2.** *Int J Mol Sci.* 2020 May 20;21(10):3622. doi: 10.3390/ijms21103622.
 24. Tibullo D, Giallongo C, Romano A, Vicario N, Barbato A, Puglisi F, Parenti R, Amorini AM, Wissam Saab M, Tavazzi B, Mangione R, Brundo MV, Lazzarino G, Palumbo GA, Volti GL, Raimondo FD, Lazzarino G. **Mitochondrial Functions, Energy Metabolism and Protein Glycosylation are Interconnected Processes Mediating Resistance to Bortezomib in Multiple Myeloma Cells.** *Biomolecules.* 2020 Apr 30;10(5). pii: E696. doi: 10.3390/biom10050696
 25. Di Rosa M, Giallongo C, Romano A, Tibullo D, Li Volti G, Musumeci G, Barbagallo I, Imbesi R, Castrogiovanni P, Palumbo GA. **Immunoproteasome Genes Are Modulated in CD34+ JAK2V617F Mutated Cells from Primary Myelofibrosis Patients.** *Int J Mol Sci.* 2020 Apr 22;21(8). pii: E2926. doi: 10.3390/ijms21082926.
 26. Castracani CC, Longhitano L, Distefano A, Anfuso D, Kalampoka S, La Spina E, Astuto M, Avola R, Caruso M, Nicolosi D, Giallongo C, Tibullo D, Volti GL. **Role of 17β-Estradiol on Cell Proliferation and Mitochondrial Fitness in Glioblastoma Cells.** *J Oncol.* 2020 Feb 14;2020:2314693. doi: 10.1155/2020/2314693. eCollection 2020
 27. Romano A, Parrinello NL, Simeon V, Puglisi F, La Cava P, Bellofiore C, Giallongo C, Camiolo G, D'Auria F, Grieco V, Larocca F, Barbato A, Cambria D, La Spina E, Tibullo D, Palumbo GA, Conticello C, Musto P, Di Raimondo F. **High-density neutrophils in MGUS and multiple myeloma are dysfunctional and immune-suppressive due to increased STAT3 downstream signaling.** *Sci Rep.* 2020 Feb 6;10(1):1983. doi: 10.1038/s41598-020-58859-x.
 28. Tibullo D, Longo A, Vicario N, Romano A, Barbato A, Di Rosa M, Barbagallo I, Anfuso CD, Lupo G, Gulino R, Parenti R, Li Volti GL, Palumbo GA, Di Raimondo FD, Giallongo C. **Ixazomib Improves Bone Remodeling and Counteracts sonic Hedgehog signaling Inhibition Mediated by Myeloma Cells.** *Cancers (Basel).* 2020 Jan 30;12(2). pii: E323. doi: 10.3390/cancers12020323.
 29. Caporarello N, D'Angeli F, Cambria MT, Candido S, Giallongo C, Salmeri M, Lombardo C, Longo A, Giurdanella G, Anfuso CD, Lupo G. **Pericytes in Microvessels: From "Mural" Function to Brain and Retina Regeneration.** *Int J Mol Sci.* 2019 Dec 17;20(24). pii: E6351. doi: 10.3390/ijms20246351. Review. PMID: 31861092
 30. Palumbo GA, Parrinello NL, Giallongo C, D'Amico E, Zanghì A, Puglisi F, Conticello C,

- Chiarenza A, Tibullo D, Raimondo FD, Romano A. **Monocytic Myeloid Derived Suppressor Cells in Hematological Malignancies**. *Int J Mol Sci*. 2019 Nov 1;20(21). pii: E5459. doi: 10.3390/ijms20215459. Review. PMID: 31683978
31. Giallongo C, Tibullo D, Camiolo G, Parrinello NL, Romano A, Puglisi F, Barbato A, Conticello C, Lupo G, Anfuso CD, Lazzarino G, Li Volti G, Palumbo GA, Di Raimondo F. **TLR4 signaling drives mesenchymal stromal cells commitment to promote tumor microenvironment transformation in multiple myeloma**. *Cell Death Dis*. 2019 Sep 20;10(10):704. doi: 10.1038/s41419-019-1959-5. Erratum in: *Cell Death Dis*. 2019 Oct 28;10(11):820 PMID: 31541083
32. Bereshchenko O, Lo Re O, Nikulenkov F, Flamini S, Kotaskova J, Mazza T, Le Pannérier MM, Buschbeck M, Giallongo C, Palumbo G, Li Volti G, Paziienza V, Cervinek L, Riccardi C, Krejci L, Pospisilova S, Stewart AF, Vinciguerra M. **Deficiency and haploinsufficiency of histone macroH2A1.1 in mice recapitulate hematopoietic defects of human myelodysplastic syndrome**. *Clin Epigenetics*. 2019 Aug 22;11(1):121. doi: 10.1186/s13148-019-0724-z. PMID: 31439048
33. Puglisi F, Parrinello NL, Giallongo C, Cambria D, Camiolo G, Bellofiore C, Conticello C, Del Fabro V, Leotta V, Markovic U, Sapienza G, Barbato A, Scalese S, Tibullo D, Brundo MV, Palumbo GA, Di Raimondo F and Romano A. **Plasticity of High-Density Neutrophils in Multiple Myeloma is Associated with Increased Autophagy Via STAT3**. *Int. J. Mol. Sci*. 2019, 20(14), 3548; <https://doi.org/10.3390/ijms20143548> PMID: PMC6678548
34. Vicario N, Bernstock JD, Spitale FM, Giallongo C, Giunta MAS, Li Volti G, Gulisano M, Leanza G, Tibullo D, Parenti R, Gulino R. **Clobetasol Modulates Adult Neural Stem Cell Growth via Canonical Hedgehog Pathway Activation**. *Int J Mol Sci*. 2019 Apr 23;20(8). pii: E1991. doi: 10.3390/ijms20081991. PMID: 31018557
35. Fuochi V, Barbagallo I, Distefano A, Puglisi F, Palmeri R, Di Rosa M, Giallongo C, Longhitano L, Fontana P, Sferrazzo G, Tiralongo F, Raccuia SA, Ronsisvalle S, Li Volti G, Furneri PM, Tibullo D. **Biological properties of *Cakile maritima* Scop. (Brassicaceae) extracts**. *Eur Rev Med Pharmacol Sci*. 2019 Mar;23(5):2280-2292. doi: 10.26355/eurrev_201903_17277. PMID: 30915777
36. Romano A, Parrinello NL, Chiarenza A, Motta G, Tibullo D, Giallongo C, La Cava P, Camiolo G, Puglisi F, Palumbo GA, Di Raimondo F. **Immune off-target effects of Brentuximab Vedotin in relapsed/refractory Hodgkin Lymphoma**. *Br J Haematol*. 2019 May;185(3):468-479. doi: 10.1111/bjh.15801. Epub 2019 Feb 15. PMID: 30768678
37. Camiolo G, Tibullo D, Giallongo C, Romano A, Parrinello NL, Musumeci G, Di Rosa M, Vicario N, Brundo MV, Amenta F, Ferrante M, Copat C, Avola R, Li Volti G, Salvaggio A, Di Raimondo F, Palumbo GA. **α -Lipoic Acid Reduces Iron-induced Toxicity and Oxidative Stress in a Model of Iron Overload**. *Int J Mol Sci*. 2019 Jan 31;20(3). pii: E609. doi: 10.3390/ijms20030609. PMID: 30708965
38. Barbagallo I, Giallongo C, Volti GL, Distefano A, Camiolo G, Raffaele M, Salerno L, Pittalà V, Sorrenti V, Avola R, Di Rosa M, Vanella L, Di Raimondo F, Tibullo D. **Heme Oxygenase Inhibition Sensitizes Neuroblastoma Cells to Carfilzomib**. *Mol Neurobiol*. 2019 Feb;56(2):1451-1460. doi: 10.1007/s12035-018-1133-6. Epub 2018 Jun 10. PMID: 29948946 Published USA
39. Romano A, Parrinello NL, La Cava P, Tibullo D, Giallongo C, Camiolo G, Puglisi F, Parisi M, Piroso MC, Martino E, Conticello C, Palumbo GA, Di Raimondo F. **PMN-MDSC and arginase are increased in myeloma and may contribute to resistance to therapy**. *Expert Rev Mol Diagn*. 2018 Jul;18(7):675-683. doi: 10.1080/14737159.2018.1470929. Epub 2018 May 3. PMID: 29707981
40. Giallongo C, Parrinello NL, La Cava P, Camiolo G, Romano A, Scalia M, Stagno F, Palumbo GA, Avola R, Li Volti G, Tibullo D, Di Raimondo F. **Monocytic myeloid-derived suppressor cells as prognostic factor in chronic myeloid leukaemia patients treated with dasatinib**. *J Cell Mol Med*. 2018 Feb;22(2):1070-1080. doi: 10.1111/jcmm.13326. Epub 2017 Dec 8. PMID: 29218828

41. Fuochi V, Li Volti G, Camiolo G, Tiralongo F, Giallongo C, Distefano A, Petronio Petronio G, Barbagallo I, Viola M, Furneri PM, Di Rosa M, Avola R, Tibullo D. **Antimicrobial and Anti-Proliferative Effects of Skin Mucus Derived from *Dasyatis pastinaca* (Linnaeus, 1758)**. Mar Drugs. 2017 Nov 1;15(11). pii: E342. doi: 10.3390/md15110342. PMID: 29104260
42. Tibullo D, Li Volti G, Giallongo C, Grasso S, Tomassoni D, Anfuso CD, Lupo G, Amenta F, Avola R, Bramanti V. **Biochemical and clinical relevance of alpha lipoic acid: antioxidant and anti-inflammatory activity, molecular pathways and therapeutic potential**. Inflamm Res. 2017 Nov;66(11):947-959. doi: 10.1007/s00011-017-1079-6. Epub 2017 Jul 4. Review. PMID: 28676917
43. Tibullo D, Giallongo C, Puglisi F, Tomassoni D, Camiolo G, Cristaldi M, Brundo MV, Anfuso CD, Lupo G, Stampone T, Li Volti G, Amenta F, Avola R, Bramanti V. **Effect of Lipoic Acid on the Biochemical Mechanisms of Resistance to Bortezomib in SH-SY5Y Neuroblastoma Cells**. Mol Neurobiol. 2017 Apr;55(4):3344-3350. doi: 10.1007/s12035-017-0575-6. Epub 2017 May 11. PMID: 28497200
44. Romano A, Giallongo C, La Cava P, Parrinello NL, Chiechi A, Vetro C, Tibullo D, Di Raimondo F, Liotta LA, Espina V, Palumbo GA. **Proteomic Analysis Reveals Autophagy as Pro-Survival Pathway Elicited by Long-Term Exposure with 5-Azacytidine in High-Risk Myelodysplasia**. Front Pharmacol. 2017 Apr 26;8:204. doi: 10.3389/fphar.2017.00204. eCollection 2017. PMID: 28491035
45. Li Volti G, Tibullo D, Vanella L, Giallongo C, Di Raimondo F, Forte S, Di Rosa M, Signorelli SS, Barbagallo I. **The Heme Oxygenase System in Hematological Malignancies**. Antioxid Redox Signal. 2017 Aug 20;27(6):363-377. doi: 10.1089/ars.2016.6735. Epub 2017 May 19. Review. PMID: 28257621
46. Tibullo D, Caporarello N, Giallongo C, Anfuso CD, Genovese C, Arlotta C, Puglisi F, Parrinello NL, Bramanti V, Romano A, Lupo G, Toscano V, Avola R, Brundo MV, Di Raimondo F, Raccuia SA. **Antiproliferative and Antiangiogenic Effects of Punica granatum Juice (PGJ) in Multiple Myeloma (MM)**. Nutrients 2016 Oct 1;8(10). pii: E611. PMID: 27706074
47. Romano A, Parrinello NL, Vetro C, Tibullo D, Giallongo C, La Cava P, Chiarenza A, Motta G, Caruso AL, Villari L, Tripodo C, Cosentino S, Ippolito M, Consoli U, Gallamini A, Pileri S, Di Raimondo F. **The prognostic value of the myeloid-mediated immunosuppression marker Arginase-1 in classic Hodgkin lymphoma**. Oncotarget 2016 Oct 11;7(41):67333-67346. doi: 10.18632/oncotarget.12024. PMID: 27637084
48. Giallongo C, Romano A, Parrinello NL, La Cava P, Brundo MV, Bramanti V, Stagno F, Vigneri P, Chiarenza A, Palumbo GA, Tibullo D, Di Raimondo F. **Mesenchymal Stem Cells (MSC) Regulate Activation of Granulocyte-Like Myeloid Derived Suppressor Cells (G-MDSC) in Chronic Myeloid Leukemia Patients**. PlosOne 2016 Jul 8;11(7):e0158392. doi: 10.1371/journal.pone.0158392. eCollection 2016. PMID: 27391078
49. C. Giallongo, D. Tibullo, N.L. Parrinello, P. La Cava, M. Di Rosa, V. Bramanti, C. Di Raimondo, C. Conticello, A. Chiarenza, G.A. Palumbo, R. Avola, A. Romano, F. Di Raimondo (2016). **Granulocyte-like Myeloid Derived Suppressor Cells (G-MDSC) are increased in Multiple Myeloma and are driven by dysfunctional mesenchymal stem cells (MSC)**. Oncotarget 2016 Dec 27;7(52):85764-85775. doi: 10.18632/oncotarget.7969. PMID: 26967390
50. Daniele Tibullo, Ignazio Barbagallo, Cesarina Giallongo, Luca Vanella, Concetta Conticello, Alessandra Romano, Salvatore Saccone, Justyna Godos, Francesco Di Raimondo, Giovanni Li Volti (2016). **Heme Oxygenase-1 Nuclear Translocation Regulates Bortezomib-Induced Cytotoxicity and Mediates Genomic Instability in Myeloma Cells**. Oncotarget 2016 May 17;7(20):28868-80. doi: 10.18632/oncotarget.7563. PMID: 26930712
51. Bramanti V, Grasso S, Tibullo D, Giallongo C, Pappa R, Brundo MV, Tomassoni D, Viola M, Amenta F, Avola R (2015). **Neuroactive molecules and growth factors modulate cytoskeletal protein expression during astroglial cell proliferation and differentiation in**

- culture.** *J Neurosci Res.* 2016 Jan;94(1):90-8. doi: 10.1002/jnr.23678. PMID: 26469526
52. Tibullo D, Di Rosa M, Giallongo C, La Cava P, Parrinello NL, Romano A, Conticello C, Brundo MV, Saccone S, Malaguarnera L, Di Raimondo F (2015). **Bortezomib modulates CHIT1 and YKL40 in monocyte-derived osteoclast and in myeloma cells.** *Front Pharmacol.* 2015 Oct 14;6:226. doi: 10.3389/fphar.2015.00226 PMID: 26528182
53. Vetro Calogero, Romano Alessandra, Ancora Flavia, Coppolino Francesco, Brundo Maria V, Raccuia Salvatore A, Puglisi Fabrizio, Tibullo D, La Cava Piera, Giallongo Cesarina, Parrinello Nunziatina L (2015). **Clinical Impact of the Immunome in Lymphoid Malignancies: The Role of Myeloid-Derived Suppressor Cells.** *FRONTIERS IN ONCOLOGY*, vol. 5, p. 104, ISSN: 2234- 943X, doi: 10.3389/fonc.2015.00104 PMID: 26052505
54. Bramanti V, Grasso S, Tibullo D, Giallongo C, Raciti G, Viola M, Avola R. (2015). **Modulation of extracellular signal-related kinase, cyclin D1, glial fibrillary acidic protein, and vimentin expression in estradiol-pretreated astrocyte cultures treated with competence and progression growth factors.** *JOURNAL OF NEUROSCIENCE RESEARCH*, vol. Sep;93(9), ISSN: 1097- 4547, doi: 10.1002/jnr.23606 PMID: 26053243
55. Giallongo Cesarina, Parrinello Nunziatina, Brundo Maria Violetta, Raccuia Salvatore Antonino, Di Rosa Michelino, La Cava Piera, Tibullo D (2015). **Myeloid derived suppressor cells in chronic myeloid leukemia.** *FRONTIERS IN ONCOLOGY*, vol. 5, p. 107, ISSN: 2234- 943X, doi: 10.3389/fonc.2015.00107 eCollection 2015. Review. PMID: 26029664
56. Giallongo Cesarina, Parrinello Nunziatina, Tibullo D, La Cava Piera, Romano Alessandra, Chiarenza Annalisa, Barbagallo Ignazio, Palumbo Giuseppe A., Stagno Fabio, Vigneri Paolo, Di Raimondo Francesco (2014). **Myeloid Derived Suppressor Cells (MDSCs) Are Increased and Exert Immunosuppressive Activity Together with Polymorphonuclear Leukocytes (PMNs) in Chronic Myeloid Leukemia Patients.** *PLOS ONE*, vol. 9, ISSN: 1932-6203, doi: 10.1371/journal.pone.0101848 eCollection 2014. PMID: 25014230
57. Tibullo D, Barbagallo Ignazio, Giallongo Cesarina, La Cava Piera, Parrinello Nunziatina, Vanella Luca, Stagno Fabio, Palumbo Giuseppe A., Volti Giovanni Li, Di Raimondo Francesco (2013). **Nuclear Translocation of Heme Oxygenase-1 Confers Resistance to Imatinib in Chronic Myeloid Leukemia Cells.** *CURRENT PHARMACEUTICAL DESIGN*, vol. 19, p. 2765-2770, ISSN: 1381- 6128 PMID: 23092325
58. Giallongo Cesarina, La Cava Piera, Tibullo D, Barbagallo Ignazio, Parrinello Nunziatina, Cupri Alessandra, Stagno Fabio, Consoli Carla, Chiarenza Annalisa, Palumbo Giuseppe A., Di Raimondo Francesco (2013). **SPARC expression in CML is associated to imatinib treatment and to inhibition of leukemia cell proliferation.** *BMC CANCER*, vol. 13, ISSN: 1471-2407, doi:10.1186/1471-2407-13-60 PMID: 23383963
59. Tibullo D, Barbagallo Ignazio, Giallongo Cesarina, La Cava Piera, Branca Antonio, Conticello Concetta, Stagno Fabio, Chiarenza Annalisa, Palumbo Giuseppe A., Di Raimondo Francesco (2012). **Effects of second-generation tyrosine kinase inhibitors towards osteogenic differentiation of human mesenchymal cells of healthy donors.** *HEMATOLOGICAL ONCOLOGY*, vol. 30, p. 27- 33, ISSN: 0278-0232, doi: 10.1002/hon.988 Epub 2011 May 5. PMID: 21544849
60. Giallongo C., Tibullo D, La Cava P., Branca A., Parrinello N., Spina P., Stagno F., Conticello C., Chiarenza A., Vigneri P., Palumbo G. A., Di Raimondo F. (2011). **BRIT1/MCPH1 Expression in Chronic Myeloid Leukemia and Its Regulation of the G2/M Checkpoint.** *ACTA HAEMATOLOGICA*, vol. 126, p. 205-210, ISSN: 0001-5792, doi: 10.1159/000329911 PMID: 21934293
61. Giallongo Cesarina, La Cava Piera, Tibullo D, Parrinello Nunziatina, Barbagallo Ignazio, Del Fabro Vittorio, Stagno Fabio, Conticello Concetta, Romano Alessandra, Chiarenza Annalisa, Palumbo Giuseppe A., Di Raimondo Francesco (2011). **Imatinib increases cytotoxicity of melphalan and their combination allows an efficient killing of chronic myeloid leukemia cells.** *EUROPEAN JOURNAL OF HAEMATOLOGY*, vol. 86, p. 216-225, ISSN: 0902-4441, doi: 10.1111/j.1600-0609.2010.01570.x Epub 2011 Feb 8. PMID: 21198861

62. Stagno Fabio, Vigneri Paolo, Del Fabro Vittorio, Stella Stefania, Restuccia Nunzio, Giallongo Cesarina, Massimino Michele, Berretta Salvatore, Pennisi Maria Stella, Tibullo D, Tirro Elena, Buscarino Calogero, Messina Angelo, Di Raimondo Francesco (2010). **Concomitant and feasible treatment with dasatinib and the anti- EGFR antibody cetuximab plus radiotherapy in a CML patient with multiple squamous neoplasias..** ACTA ONCOLOGICA, vol. 49, p. 109-110, ISSN: 1651-226X, doi: 10.3109/02841860903302913 PMID:19842797
63. Barbagallo Ignazio, Vanella Angelo, Peterson Stephen J., Kim Dong Hyun, Tibullo D, Giallongo Cesarina, Vanella Luca, Parrinello Nunziatina, Palumbo Giuseppe A., Di Raimondo Francesco, Abraham Nader G., Asprinio David (2010). **Overexpression of heme oxygenase- 1 increases human osteoblast stem cell differentiation.** JOURNAL OF BONE AND MINERAL METABOLISM, vol. 28, p. 276-288, ISSN: 0914- 8779, doi: 10.1007/s00774-009-0134-y Epub 2009 Nov 19. PMID:19924377
64. Tibullo D, Giallongo Cesarina, La Cava Piera, Berretta Salvatore, Stagno Fabio, Chiarenza Annalisa, Conticello Concetta, Palumbo Giuseppe A., Di Raimondo Francesco (2009). **Effects of imatinib mesylate in osteoblastogenesis.** EXPERIMENTAL HEMATOLOGY, vol. 37, p. 461-468, ISSN: 0301-472X, doi: 10.1016/j.exphem.2008.12.008 PMID:19302920
65. Barbagallo Ignazio, Tibullo D, Di Rosa Michelino, Giallongo Cesarina, Palumbo Giuseppe A., Raciti Giuseppina, Campisi Agata, Vanella Angelo, Green Colin J., Motterlini Roberto (2008). **A cytoprotective role for the heme oxygenase-1/CO pathway during neural differentiation of human mesenchymal stem cells.** JOURNAL OF NEUROSCIENCE RESEARCH, vol. 86, p. 1927-1935, ISSN: 0360- 4012, doi: 10.1002/jnr.21660 PMID:18381758

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

Catania, 16/01/2023

