

CURRICULUM VITAE STEFANIA BRUNO

Studies and positions:

- 1993-1998: Degree in Biological Science at the University of Torino.
- 1999-2003: PhD in Human Oncology at the University of Torino.
- 2003-2007: PostDoctoral fellowship at the Department of Internal Medicine, University of Torino.
- 2008-2011: Specialization in Clinical Biochemistry at the University of Torino and Co.Co.Pro with Sis.Ter S.p.A. for the project "Role of the human bone marrow mesenchymal stem cells in tissue regeneration after induction of experimental acute kidney injury" at the Department of Internal Medicine, Molecular Biotechnology Center (MBC), Torino, Italy.
- 2011-2017: Assistant Professor of Nephrology, Department of Molecular Biotechnology and Healthy Sciences, MBC, Torino.
- 2017-2020: Assistant Professor of Nephrology, Department of Medical Sciences, University of Torino, Laboratory of Nephrology and Renal Immunopathology, Molinette Hospital and MBC, Torino, Italy.
- 2020-february 2022: Assistant Professor of Medical and Biotechnology Laboratory Techniques, Department of Medical Sciences, University of Torino, Laboratory of Translation Research, Molinette Hospital and MBC, Torino, Italy.
- 2022 March: Associate Professor of Medical and Biotechnology Laboratory Techniques, Department of Medical Sciences, University of Torino, Laboratory of Translation Research, Molinette Hospital and MBC, Torino, Italy.

Professional experience: Date, subject of study and place

- 1999-2001: Ex-vivo expansion and lentiviral gene transfer of human primitive cord blood stem cells capable of hematopoietic long term engraftment. Department of Oncological Science, University of Torino (Italy), Laboratory of Clinical Oncology, directed by Prof. Aglietta and Piacibello, Institute for Cancer Research and Treatment (IRCC), Candiolo (TO).
- 2001-2003: Expansion and differentiation of human hematopoietic progenitor and stem cells from different sources (cord blood, bone marrow, mobilized peripheral blood). Department of Oncological Science, University of Torino (Italy), Laboratory of Clinical Oncology, Institute of Cancer Research and Treatment (IRCC), Candiolo (TO).
- 2003-2004: Isolation and characterization of renal progenitor cells from adult human kidney. Department of Internal Medicine, University of Torino (Italy), Molinette Hospital, Laboratory of Renal Immunopathology, directed by Prof. Camussi.
- 2004-2007: Isolation, characterization and functional *in vitro* and *in vivo* studies of progenitor cells isolated from kidney and renal tumours and from normal adult liver. Study of the contribution of CD133⁺ renal progenitor cells to tumor angiogenesis. Department of Internal Medicine, University of Torino, MBC, Laboratory of Renal and Vascular Physiopathology, directed by Prof. Camussi .
- 2007-2011: Study of the possible role of extra-cellular vesicles derived from human bone marrow mesenchymal stem cells in the repair of experimental models of acute kidney injury and of the possible anti-tumor effect of EVs from different stem cell sources. Department of Internal Medicine, University of Torino, MBC, Stem Cell Laboratory, directed by Prof. Camussi, in collaboration with Prof. Tetta from Fresenius Medical Care.
- 2011-2018: Study of the possible role of extracellular vesicles derived from adult stem cells in the tissue repair in different experimental models of acute renal and hepatic injuries, and in tumor development. Department of Molecular Biotechnology and Healthy Science, MBC, University of Torino.
- 2019-until now: Study of the possible anti-fibrotic effects of extracellular vesicles derived from human adult stem cells in different *in vitro* and *in vivo* experimental models of renal and hepatic fibrosis development. Department of Medical Sciences, Molinette Hospital and MBC, University of Torino.

Scientific Meetings

- European Working Group on Clinical Cell Analysis. European school of flow cytometry. Third Workshop Summer School. Clinical Cytometry in Hematology. Università d'Urbino, Italy, 17-19 September, 2000.
- XVI Congresso Nazionale della Società Italiana di Cancerologia. Torino, 5-6-7 October, 2000.
- The 42ND Annual Meeting of the American Society of Hematology. San Francisco, California, December 1-5, 2000.
- Caratterizzazione ed isolamento delle Cellule Staminali a scopo di Trapianto. Torino, 26 September, 2001.
- Hematopoietic stem cell therapy: the basic question. Milano (Italy), 1 February 2002.
- Practical Training Course "Advanced Technologies in Stem Cell Growth and Development" (European Commission, 5th Framework Programme for RTD "Quality of Life and Management of Living Resource"- Accompanying Measure). Pisa (Italy), May 27-June 7 2002.
- 7th Congress of the European Hematology Association. 6-9 June, Florence, Italy, 2002. Oral communication: "*In vitro* and *in vivo* megakaryocyte differentiation capacity of fresh and expanded cord blood CD34⁺ cells".

- VII Congress of the Italian Society of Experimental Hematology, 15-17 September, Modena (Italy), 2002. Oral communication: "Cord Blood CD34⁺ cell megakaryocytic differentiation ability after extensive *ex-vivo* expansion: *in vitro* and *in vivo* models".
- DNA course on FACSVantage SE. Milano (Italy), 8-9 January, 2003.
- The International Conference II, Hematopoietic Stem Cells Research and Clinical Applications. 13-15 February, Paris, 2003.
- Third Interdisciplinary Euroconference on ANGIOGENESIS. October 24-27, Dublin (Ireland), 2003.
- Adult Stem Cells a challenge for the future. March 21-23, Bologna, Italy, 2004.
- Adult stem cells: from the basic to the bedside. October 21, Florence, Italy, 2005.
- The first ESH-EBMT-EUROCORD Euroconference on Stem Cell Research. April 15-17, 2005 in Cascais, Portugal
- Participated as a lecturer in the Fourth course on "Genetic and Renal disease" with a lesson entitled: "Stem cells in the adult kidney and their possible role in renal repair". June 8-10, 2006 in Genova, Italy.
- Stemness the bright and the dark side: normal and cancer stem cells. 19-22 September 2006, Catanzaro (Italy). Oral communication: "Resident CD133⁺ renal progenitor cells contribute to tumor angiogenesis".
- 14th annual meeting of the International Society for cellular therapy (ISCT). 17-22 May 2008, Miami, Florida, USA
- World Congress of Nephrology (WCN). 22-26 May 2009, Milan, Italy. Oral communication: "Human mesenchymal stem cells-derived microvesicles protect from acute tubular injury".
- Invited speaker VII International conference on Hypertension and Kidney "The use of stem cells in kidney disease: of hopes and challenges", 24-26 February 2010, Madrid, Spain.
- 5th World Congress on Preventive & Regenerative Medicine. 5-7 October 2010, Hannover, Germania. Oral communication: "Microvesicles from mesenchymal stem cells protect against acute kidney injury and improve survival".
- "Stem Cell Research-Italy & International Society for Cellular Therapy-Europe: Join Meeting" 10-12 June 2011, Montesilvano (PE), Italy. Oral communication: "Microvesicles derived from human adult mesenchymal stem cells protect against reperfusion-induced acute and chronic kidney injury".
- International Society for Extracellular Vesicles (ISEV), 18-21 April 2012, Gothenburg (Sweden). Oral communication: "Microvesicles (MVs) derived mesenchymal stem cells for treatment of kidney injury".
- ISEV, 17-20 April 2013, Boston (USA). Oral communication: "Mesenchymal stromal cell-derived extracellular vesicles inhibit *in vitro* and *in vivo* tumor cell proliferation".
- Invited speaker at 7th meeting of the forum of Italian Researchers on Mesenchymal and Stromal Stem cells with a presentation entitled: "Effects of mesenchymal stromal cell-derived extra-cellular vesicles on tumor growth", Milano 13 May 2016.
- Invited speaker at the Gordon Conference, 21-26 August 2016, Sunday River, Newry, ME, USA with a presentation entitled: "Mesenchymal stromal cell derived extracellular vesicles facilitate the repair of renal injury".
- Invited speaker at "Select Biosciences Conference on Extracellular Vesicles", 26-28 September 2017, Cambridge UK, with a presentation entitled: "Renal Regenerative Potential of Different Extracellular Vesicle Populations Derived from BM-MSCs".
- GISM (Gruppo Italiano Cellule Staminali Mesenchimali) annual meeting, Assisi 12-13 April 2018. "Renal regenerative potential of extra-cellular vesicles derived from bone marrow mesenchymal stromal cell". Poster.
- First EVIta (Italian Society of extra-cellular vesicles) meeting Palermo 6-8 November 2019. "miRNA enrichment of mesenchymal stromal cell extracellular vesicles enhances their renal pro-regenerative potential". Poster.
- ISEV, 18-21 May 2021, Virtual Meeting. "Extracellular vesicles derived from human liver-stem cells improve fibrosis and inflammation associated with non-alcoholic steatohepatitis and modified lncRNA expression profile". Oral communication. "Extracellular vesicles derived from human liver stem cells attenuate chronic kidney disease development in an *in vivo* experimental model of renal ischemia and reperfusion injury". Poster.
- Second EVIta meeting Lucca, Italy, 20-22 September 2021. "Extracellular vesicles derived from human liver stem cells attenuate chronic kidney disease development in an *in vivo* experimental model of renal ischemia and reperfusion injury" and "Human liver stem cell-derived extracellular vesicles target hepatic stellate cells and attenuate their pro-fibrotic phenotype", Posters.
- Invited speaker at "Joint International Xenotransplantation Association and Cell Transplant and Regenerative Medicine Society", Virtual Congress; 23-25 September 2021 with a presentation entitled: "Extracellular vesicles to repair the diseased liver".
- Invited speaker at the Gordon Conference, 25-29 July 2022, Sunday River, Newry, ME, USA with a presentation entitled: "Extracellular vesicles derived from human liver stem cells attenuate chronic renal injury in two different animal models of chronic kidney disease"
- Invited speaker at the Annual Conference 2022, Torino, 20-21 October of the Italian Group of Mesenchymal Cells (GISM) with a presentation entitled: "Translational lab-to-clinic hurdles in therapy with MSC-EVs".

Patents

- International patent: **Bruno Stefania**, Herrera Maria Betariz, Fonsato Valentina, Camussi Giovanni, Tetta Ciro. (2011). "Microvesicles (MVs) derived from adult stem cells for use in the therapeutic treatment of a tumor disease". WO2011107437 (A1)
- International patent: Camussi Giovanni, **Bruno Stefania**, Bussolati Benedetta (2011). "Isolated multipotent mesenchymal stem cells from human adult glomeruli (HGL-MSC), a method of preparing thereof and uses thereof in the regenerative medicine of the kidney". US2011256111 (A1), EP2186883 (A1)

Awards

- Award of the ERA-EDTA for best abstracts. Abstract: "CD133+ renal progenitor cells contribute to development and angiogenesis of renal carcinoma. Glasgow, 2006".
- Award of the World Congress of Nephrology for best abstract presented by young authors. Abstract: "Human mesenchymal stem cells-derived microvesicles protect from acute tubular injury". Milan, 2009.
- Award for best abstract presented at ISEV meeting, 2013. "Mesenchymal stromal cell-derived extracellular vesicles inhibit in vitro and in vivo tumor cell proliferation".

List of Publications:

1. G. Cavalloni, A. Danè, W. Piacibello, **S. Bruno**, E. Lamas, C. Bréchet, M. Aglietta. The involvement of human-NUC gene in polyploidization of K562 cell line. *Experimental Hematology*, Vol. 28: 1432-1440 (2000).
2. W. Piacibello, L. Gammaitoni, **S. Bruno**, M. Gunetti, F. Fagioli, G. Cavalloni, M. Aglietta. The negative influence of IL-3 on the expansion of human cord blood in vivo long term repopulating stem cells. *Journal of hematotherapy and stem cells research*, Vol. 9: 945-956 (2000).
3. **S. Bruno**, L. Gammaitoni, M. Gunetti, F. Sanavio, F. Fagioli, M. Aglietta, W. Piacibello Different growth factors requirements for the ex-vivo amplification of transplantable human cord blood cells in a NOD/SCID mouse model. *The Journal of biological regulators & homeostatic agents*, Vol. 15: 38-48 (2001).
4. M. Berger, F. Fagioli, W. Piacibello, F. Sanavio, K. Mareschi, E. Biasin, **S. Bruno**, L. Gammaitoni, M. Gunetti, E. Madon, M. Aglietta. Role of different medium and growth factors on placental blood stem cell expansion: an in vitro and in vivo study. *Bone Marrow Transplantation*, Vol. 29: 443-448 (2002).
5. L. Ailles, M. Schimdt, F. Santoni de Sio, H. Glimm, S. Cavalieri, **S. Bruno**, W. Piacibello, C. Von Kalle, L. Naldini. Molecular evidence of lentiviral vector mediated gene transfer into human self-renewing, multi-potent, long-term NOD/SCID repopulating hematopoietic cells *Molecular Therapy*, Vol. 6: 615-626 (2002).
6. W. Piacibello, **S. Bruno**, F. Sanavio, S. Droetto, M. Gunetti, L. Ailles, F. Santoni de Sio, A. Viale, L. Gammaitoni, A. Lombardo, L. Naldini, M. Aglietta. Lentiviral gene transfer and ex-vivo expansion of human primitive stem cells capable of primary, secondary and tertiary multilineage repopulation in NOD/SCID mice. *Blood*, Vol. 100: 4391-4400 (2002).
7. L. Gammaitoni, **S. Bruno**, F. Sanavio, M. Gunetti, O. Kollet, G. Cavalloni, M. Falda, F. Fagioli, T. Lapidot, M. Aglietta, W. Piacibello. Ex-vivo expansion of human adult stem cells capable of primary and secondary hemopoietic reconstitution. *Experimental Hematology*, Vol. 31: 261-270 (2003).
8. **S. Bruno**, M. Gunetti, L. Gammaitoni, A. Danè, G. Cavalloni, F. Sanavio, F. Fagioli, M. Aglietta, W. Piacibello. In vitro and in vivo megakaryocyte differentiation capacity of fresh and ex-vivo expanded cord blood cells: rapid and transient megakaryocyte reconstitution. *Haematologica*, Vol. 88: 379-387 (2003).
9. F. Leone, E. Perissinotto, G. Cavalloni, V. Fonsato, **S. Bruno**, N. Surrenti, D. Hong, A. Capaldi, M. Geuna, W. Piacibello, M. Aglietta. Expression of the c-ERB-2/HER2 proto-oncogene in normal hematopoietic cells. *Journal of Leukocyte Biology*, Vol. 74: 593-601(2003).
10. **S. Bruno**, M. Gunetti, L. Gammaitoni, E. Perissinotto, L. Caione, F. Sanavio, F. Fagioli, M. Aglietta, W. Piacibello. Fast but durable megakaryocyte and platelet production in NOD/SCID mice transplanted with ex-vivo expanded human cord blood CD34+ cells. *Stem Cells*, Vol. 22: 135-143 (2004).
11. L. Gammaitoni, K. C. Weisel, M. Gunetti, K-D Wu, **S. Bruno**, S. Pinelli, A. Bonati, M. Aglietta, M. A. S. Moore, W.

- Piacibello. Elevated telomerase activity, minimal telomere loss in cord blood long-term cultures with extensive stem cell replication. *Blood*, Vol. 104: 4440-4448 (2004).
12. S. Droetto, A. Viale, L. Primo, N. Jordane, **S. Bruno**, M. Pagano, W. Piacibello, F. Bussolino, M. Aglietta. Vasculogenic potential of long term repopulating cord blood progenitors. *The FASEB Journal*, Vol. 18: 1273-1275 (2004).
 13. M.B. Herrera, B. Bussolati, **S. Bruno**, V. Fonsato, G. Mauriello Romanizzi, G. Camussi. Mesenchymal stem cells contribute to the renal repair of acute tubular epithelial injury. *International Journal of Molecular Medicine*, Vol. 14: 1035-1041 (2004).
 14. B. Bussolati*, **S. Bruno***, C. Grange, S. Buttiglieri, MC Deregibus, D. Cantino, G. Camussi. Isolation of renal progenitor cells from adult human kidney. In press: *American Journal of Pathology*, Vol 166: 545-555 (2005). (*equally contributed).
 15. C. Grange, B. Bussolati, **S. Bruno**, V. Fonsato, A. Sapino, G. Camusi. Isolation and characterization of human breast tumor-derived endothelial cells. *Oncology Reports*, Vol 15(2):381-386 (2006)
 16. B. Bussolati, C. Grange, **S. Bruno**, S. Buttiglieri, M.C. Deregibus, L. Tei, S. Aime, G. Camusi. Neural-cell adhesion molecule (NCAM) is expressed by immature and renal tumor-derived endothelial cells and favors endothelial cell organization into capillary-like structures. *Experimental Cell Research*, 312: 913-924 (2006).
 17. L. Gammaitoni*, S. Lucchi*, **S. Bruno***, M. Tesio, M. Gunetti, Y. Pignochino, G. Migliardi, L. Lazzari, M. Aglietta, P. Rebulli, W. Piacibello. Serial transplantation in NOD/SCID mice of transduced human CD34⁺ cord blood cells. Efficient oncoretroviral gene transfer and ex vivo expansion under serum-free conditions. *Stem Cells*, 24: 1201-1212 (2006). (*equally contributed).
 18. **S. Bruno**, B. Bussolati, P. Scacciatella, S. Marra, F. Sanavio, C. Tarella, G. Camussi. Combined administration of G-CSF and GM-CSF stimulates monocyte-derived pro-angiogenic cells in patients with acute myocardial infarction. *Cytokine*, 34: 56-65 (2006).
 19. **S. Bruno**, B. Bussolati, C. Grange, F. Collino, M.E. Graziano, U. Ferrando, G. Camussi. CD133⁺ renal progenitor cells contribute to tumor angiogenesis. *American Journal of Pathology*, 169: 2223-2235 (2006).
 20. MB Herrera, **S. Bruno**, S. Buttiglieri, C. Tetta, S. Gatti, MC Deregibus, B. Bussolati, G. Camussi. Isolation and characterization of a stem cells population from adult human liver. *Stem Cells*, 24(12):2840-2850 (2006).
 21. MB Herrera, B Bussolati, **S. Bruno**, L Morando, G Mauriello-Romanazzi, F Sanavio, I Stamenkovic, L Biancone, G Camussi. Exogenous mesenchymal stem cells localize to the kidney by means of CD44 following acute tubular injury. *Kidney International*. 72(4):430-441 (2007).
 22. MC Deregibus, V Cantaluppi, R Calogero, M Lo Iacono, C Tetta, L Biancone, **S. Bruno**, B Bussolati, G Camussi. Endothelial progenitor cell derived microvesicles activate an angiogenic program in endothelial cells by a horizontal transfer of mRNA. *Blood*. 110(7):2440-2448 (2007).
 23. B. Bussolati*, **S. Bruno***, C Grange, U Ferrando, G Camussi. Identification of a tumor-initiating stem cell population in human renal carcinomas. *The FASEB Journal*. 22(10):3696-3705 (2008). (*equally contributed).
 24. V Cantaluppi, **S. Bruno**, G Camussi. Pancreatic ductal transdifferentiation for β -cell neogenesis. *Experts Opinion Ther Patents*. 18 (8):963-67 (2008).
 25. **S. Bruno**, C. Tetta, G Camussi. Stem cells and kidney. *Il Patologo Clinico. Journal of Molecular and Clinical Pathology*. 3:8-15 (2008). *Review*.
 26. **S. Bruno**, B. Bussolati, C Grange, F Collino, L Verdun Cantogno, MB Herrera, L Biancone, C Tetta, G Segoloni, G Camussi. Isolation and characterization of resident mesenchymal stem cells in human glomeruli. *Stem Cells and Development*. 18(6):867-80 (2009).
 27. **S. Bruno**, C. Grange, MC. Deregibus, RA Calogero, S Saviozzi, F. Collino, L. Morando, A Busca, M Falda, B Bussolati, C Tetta, G Camussi. Mesenchymal stem cell-derived microvesicles protect against acute tubular injury.

28. Y. Pignochino, G. Grignani, G. Cavalloni, M. Motta, M. Tapparo, **S. Bruno**, A. Bottos, L. Gammaitoni, G. Migliardi, G. Camussi, M. Alberghini, B. Torchio, S. Ferrari, F. Bussolino, F. Fagioli, P. Picci, M. Aglietta. Sorafenib blocks tumour growth, angiogenesis and metastatic potential in preclinical models of osteosarcoma through a mechanism potentially involving the inhibition of ERK1/2, MCL-1 and ezrin pathways. *Molecular Cancer*. 8:118 (2009).
29. F. Collino, MC Deregibus, **S. Bruno**, L. Sterpone, G. Aghemo, L. Viltono, C. Tetta, G. Camussi. Microvesicles derived from adult human bone marrow and tissue specific mesenchymal stem cells shuttle selected pattern of miRNAs. *Plos One*. 5:e11803 (2010).
30. G. Camussi, MC Deregibus, **S. Bruno**, V. Cantaluppi, L. Biancone. Exosomes/microvesicles as a mechanism of cell-to-cell communication. *Kidney International*. 78:838-848 (2010). *Review*.
31. PV Hauser, R De Fazio, **S. Bruno**, S. Sdei, C. Grange C, B. Bussolati, C. Benedetto, G. Camussi. Stem cells derived from human amniotic fluid contribute to acute kidney injury recovery. *American Journal of Pathology*. 177:2011-2021 (2010).
32. S. Gatti*, **S. Bruno***, MC Deregibus, A. Sordi, V. Cantaluppi, C. Tetta; G. Camussi. Microvesicles derived from human adult mesenchymal stem cells protect against ischaemia-reperfusion-induced acute and chronic kidney injury. *Nephrol Dial Transplant*. 26:1474-1483 (2011). (*equally contributed).
33. G. Camussi, MC Deregibus, **S. Bruno**, C Grange, V Fonsato, C Tetta. Exosome/microvesicle-mediated epigenetic reprogramming of cells. *Am J Cancer Res*. 1(1):98-110 (2011). *Review*.
34. C Tetta, **S. Bruno**, V. Fonsato, MC Deregibus, G. Camussi. The role of microvesicles in tissue repair. *Organogenesis*. 7:1-11 (2011). *Review*. *Review*.
35. CF Mora, E Ranghini, **S Bruno**, B Bussolati, G Camussi, B Wilm, D Edgar, SE Kenny, P Murray. Differentiation of podocyte and proximal tubule-like cells from a mouse kidney-derived stem cell line. *Stem Cells and Development*. In press (2011).
36. S. Azzi, **S. Bruno**, J Giron-Michel, D Clay, A Devocelle, M Croce, S Ferrini, S. Chouaib, A. Vazquez, B. Charpentier, G. Camussi, B. Azzarone, P. Eid. Differentiation therapy: targeting human renal cancer stem cells with interleukin 15. *J Natl Cancer Inst*. 103(24):1884-98 (2011).
37. C. Zanini, **S. Bruno**, G. Mandili, D. Baci, F. Cerutti, G. Cenacchi, L. Izzi, G. Camussi, M. Forni. Differentiation of mesenchymal stem cells derived from pancreatic islets and bone marrow into islet-like cell phenotype. *PLoS One* 6(12):e28175 (2011).
38. **Bruno S**, Grange C, Collino F, Deregibus MC, Cantaluppi V, Biancone L, Tetta C, Camussi G. Microvesicles derived from mesenchymal stem cells enhance survival in a lethal model of acute kidney injury. *PLoS One*. 2012;7(3):e33115.
39. Cavallari C, Fonsato V, Herrera MB, **Bruno S**, Tetta C, Camussi G. Role of Lefty in the anti tumor activity of human adult liver stem cells. *Oncogene*. 2013 Feb 14;32(7):819-26.
40. Cantaluppi V, Gatti S, Medica D, Figliolini F, **Bruno S**, Deregibus MC, Sordi A, Biancone L, Tetta C, Camussi G. Microvesicles derived from endothelial progenitor cells protect the kidney from ischemia-reperfusion injury by microRNA-dependent reprogramming of resident renal cells. *Kidney Int*. 2012 Aug;82(4):412-27.
41. Fonsato V, Collino F, Herrera MB, Cavallari C, Deregibus MC, Cisterna B, **Bruno S**, Romagnoli R, Salizzoni M, Tetta C, Camussi G. Human liver stem cell-derived microvesicles inhibit hepatoma growth in SCID mice by delivering antitumor microRNAs. *Stem Cells*. 2012 Sep;30(9):1985-98.
42. Biancone L, **Bruno S**, Deregibus MC, Tetta C, Camussi G. Therapeutic potential of mesenchymal stem cell-derived microvesicles. *Nephrol Dial Transplant*. 2012 Aug;27(8):3037-42. *Review*.
43. Tetta C, Consiglio AL, **Bruno S**, Tetta E, Gatti E, Dobрева M, Cremonesi F, Camussi G. The role of microvesicles derived from mesenchymal stem cells in tissue regeneration, a dream for tendon repair? *Muscles Ligaments*

Tendons J. 2012 Oct 16;2(3):212-21. *Review*.

44. Herrera MB, Fonsato V, **Bruno S**, Grange C, Gilbo N, Romagnoli R, Tetta C, Camussi G. Human liver stem cells improve liver injury in a model of fulminant liver failure. *Hepatology*. 2013 Jan;57(1):311-9.
45. **Bruno S**, Collino F, Deregibus MC, Grange C, Tetta C, Camussi G. Microvesicles derived from human bone marrow mesenchymal stem cells inhibit tumor growth. *Stem Cells Dev*. 2013 Mar 1;22(5):758-71.
46. **Bruno S**, Camussi G. Role of mesenchymal stem cell-derived microvesicles in tissue repair. *Pediatr Nephrol*. 2013 Dec;28(12):2249-54. *Review*.
47. Pignochino Y, Dell'aglio C, Basiricò M, Capozzi F, Soster M, Marchiò S, **Bruno S**, Gammaitoni L, Sangiolo D, Torchiario E, D'Ambrosio L, Fagioli F, Ferrari S, Alberghini M, Picci P, Aglietta M, Grignani G. The combination of Sorafenib and Everolimus abrogates mTORC1 and mTORC2 uporegulation in Osteosarcome preclinical models. *Clin Cancer Res* 2013 Apr15;19(8):2117-2131.
48. De Chiara L, Fagoonee S, Ranghino A, **Bruno S**, Camussi G, Tolosano E, Silengo L, Altruda F. Renal cells from spermatogonial germline stem cells protect against kidney injury. *J Am Soc Nephrol*. 2014 Feb;25(2):316-28.
49. Grange C, Tapparo M, **Bruno S**, Chatterjee D, Quesenberry PJ, Tetta C, Camussi G. Biodistribution of mesenchymal stem cell-derived extracellular vesicles in a model of acute kidney injury monitored by optical imaging. *Int J Mol Med*. 2014 May;33(5):1055-63.
50. Lindoso RS, Collino F, **Bruno S**, Araujo DD, Sant'anna J, Tetta C, Provero P, Quesenberry PJ, Vieyra A, Einicker-Lamas M, Camussi G. Extracellular vesicles released from mesenchymal stromal cells modulate miRNA in renal tubular cells and inhibit ATP depletion injury. *Stem Cells Dev*. 2014 Aug 1;23(15):1809-19.
51. Lopatina T, **Bruno S**, Tetta C, Kalinina N, Porta M, Camussi G. Platelet-derived growth factor regulates the secretion of extracellular vesicles by adipose mesenchymal stem cells and enhances their angiogenic potential. *Cell Commun Signal*. 2014 Apr 11; 12:26.
52. **Bruno S**, Collino F, Iavello A, Camussi G. Effects of mesenchymal stromal cell-derived extracellular vesicles on tumor growth. *Front Immunol*. 2014; 5:382. *Review*.
53. **Bruno S**, Chiabotto G, Camussi G. Concise review: different mesenchymal stromal/stem cell populations reside in the adult kidney. *Stem Cells Transl Med*. 2014;3(12):1451-5. *Review*.
54. Herrera Sanchez MB, **Bruno S**, Grange C, Tapparo M, Cantaluppi V, Tetta C, Camussi G. Human liver stem cells and derived extracellular vesicles improve recovery in a murine model of acute kidney injury. *Stem Cell Res Ther*. 2014;5(6):124.
55. Lopatina T, Mazzeo A, **Bruno S**, Tetta C, Kalinina N, Romagnoli R, Salizzoni M, Porta M, Camussi G. The Angiogenic Potential of Adipose Mesenchymal Stem Cell-derived Extracellular Vesicles is modulated by Basic Fibroblast Growth Factor. *J Stem Cell Res Ther* 2014, 4:10. <http://dx.doi.org/10.4172/2157-7633.1000245>.
56. Cantaluppi V, Medica D, Mannari C, Stiaccini G, Figliolini F, Dellepiane S, Quercia AD, Migliori M, Panichi V, Giovannini L, **Bruno S**, Tetta C, Biancone L, Camussi G. Endothelial progenitor cell-derived extracellular vesicles protect from complement-mediated mesangial injury in experimental anti-Thy1.1 glomerulonephritis. *Nephrol Dial Transplant*. 2015;30(3):410-22.
57. Collino F*, **Bruno S***, Incarnato D, Dettori D, Neri F, Provero P, Pomatto M, Oliviero S, Tetta C, Quesenberry PJ, Camussi G. AKI Recovery Induced by Mesenchymal Stromal Cell-Derived Extracellular Vesicles Carrying MicroRNAs. *J Am Soc Nephrol*. 2015;26(10):2349-60. (*equally contributed).
58. **Bruno S**, Deregibus MC, Camussi G. The secretome of mesenchymal stromal cells: Role of extracellular vesicles in immunomodulation. *Immunol Lett*. 2015;168(2):154-8. *Review*.
59. Hasmim M*, **Bruno S***, Azzi S, Gallerne C, Michel JG, Chiabotto G, Lecoz V, Romei C, Spaggiari GM, Pezzolo A, Pistoia V, Angevin E, Gad S, Ferlicot S, Messai Y, Kieda C, Clay D, Sabatini F, Escudier B, Camussi G, Eid P, Azzarone B, Chouaib S. Isolation and characterization of renal cancer stem cells from patient-derived xenografts.

Oncotarget. 2016;7(13):15507-24. (*equally contributed).

60. **Bruno S**, Grange C, Tapparo M, Pasquino C, Romagnoli R, Dametto E, Amoroso A, Tetta C, Camussi G. Human Liver Stem Cells Suppress T-Cell Proliferation, NK Activity, and Dendritic Cell Differentiation. *Stem Cells Int.* 2016;2016:8468549.
61. Chiabotto G, **Bruno S**, Collino F, Camussi G. Mesenchymal Stromal Cells Epithelial Transition Induced by Renal Tubular Cells-Derived Extracellular Vesicles. *PLoS One.* 2016;11(7):e0159163.
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