

Gianmaria Miolo -CV

Name Surname: Gianmaria Miolo

Place and date of birth: Pordenone (Italy), August 31, 1970

Education and Training

- 2003, Specialization in Medical Genetics, University of Ferrara, Italy
- 2008, Specialization in Medical Oncology, University of Udine, Italy

Current Position: Medical Oncology at Medical Oncology Prevention Unit , Department of Medical Oncology, IRCCS National Cancer Institute. (CRO), Aviano, Italy.

Work Experience

- From 2004 to 2005 Contract Researcher at the Experimental Oncology 1 Research Unit, IRCCS Centro di Riferimento Oncologico (CRO), Aviano, Italy.
- From 2008 to 2017 Medical Oncologist at Medical Oncology Unit, Department of Medical Oncology, IRCCS National Cancer Institute (CRO), Aviano, Italy.
- From 2017 Medical Oncologist at Medical Oncology Prevention Unit, Department of Medical Oncology, IRCCS National Cancer Institute, (CRO) Aviano, Italy.

Experience and Research Interests

During the period at the IRCCS – National Cancer Institute Gianmaria Miolo gained experience in the oncology treatment of gastrointestinal tumors and rare tumors. He is now involved in clinical trials aimed to the development and clinical application of new and innovative omics approaches in cancer diseases.

Publications

S. Agata, A. Viel, L. Della Puppa, L. Cortesi, G. Fersini, M. Callegaro, M.D. Palma, R. Dolcetti, M. Federico, S. Venuta, G. Miolo, E. D'Andrea, M. Montagna. Prevalence of BRCA1 genomic rearrangements in a large cohort of Italian breast and breast/ovarian cancer families without detectable BRCA1 and BRCA2 point mutations. *Genes, Chromosomes & Cancer*. 2006; 45:791-797 doi:10.1002/gcc.20342

G. Miolo, L. Della Puppa, M. Santarosa, C. De Giacomi, A. Veronesi, E. Bidoli, M.G. Tibiletti, A. Viel, R. Dolcetti. Phenotypic features and genetic characterization of male breast cancer families: identification of two recurrent BRCA2 mutations in north-east of Italy. *BMC Cancer* 2006;6:156.

G. Miolo, N. La Mura, P. Nigri, A. Murrone, L. Da Ronch, A. Veronesi, C. Lestuzzi. The cardiotoxicity of chemotherapy: new prospects for an old problem. *Radiol Oncol* 2006; 40(3):149-161

G. Miolo, V. Canzonieri, C. De Giacomi, L. Della Puppa, R. Dolcetti, D. Lombardi, T. Perin, S Scalzone, A Veronesi, A Viel: Selecting for BRCA1 testing using a combination of homogeneous selection criteria and immunohistochemical characteristics of breast cancers. *BMC Cancer* 2009;9:360

G. Miolo, P. Baldo, Bidoli E, D. Lombardi, S Scalone, R Sorio, A Veronesi. Incidence of palmar-plantar erythrodysesthesia in pretreated and unpretreated patients receiving pegylated liposomal doxorubicin. *Tumori* 95: 687-690, 2009

D. Lombardi, S. Scalone, D. Crivellari, M.D. Magri, N. La Mura, G. Miolo, A. Murrone, T. Perin, F. Coran, E. Candiani, S Massarut, A Veronesi. Epirubicin and docetaxel as neoadjuvant treatment of locally advanced breast cancer: a phase II study. *Tumori*, 2010, 96: 229-233 doi 10.1700/488.5771

A. Veronesi, G. Miolo, M.D. Magri, D. Crivellari, S. Scalone, E. Bidoli D. Lombardi. Late tamoxifen in patients previously operated for breast cancer without postoperative tamoxifen: 5-year results of a single institution randomised study. *BMC Cancer* 2010, 10: 205 doi:10.1186/1471-2407-10-205

S. Frustaci, G. Miolo, A. Buonadonna, D. Crivellari, S. Scalone. Evidence-Based Medicine: What does it mean and where are we going? F. Chiappelli et al. (eds.), Evidence-Based Practice: Toward Optimizing Clinical Outcomes, DOI 10.1007/978-3-642-05025-1-14 ©Springer-Verlag Berlin Heidelberg 2010

G. Miolo, Crovatto M., Manno M., Pivetta B., Tessitori G., Picci L. Heterozygous variant at nucleotide position 875+11A>T in exon 6A cystic fibrosis transmembrane conductance regulator gene induces 852del22 mutation false-positivity by line probe assay. *Fertil Steril.* 2011; 95 (3) 1121.e1-e4

A. Rossetto, E. Saccomano, A. Zompicchiatti, C. Avellini, S. Toffoli , G. Miolo, S. Frustaci, A. Uzzau. Mesenchymal chondrosarcoma of the spleen: report of a case. *Tumori*. 2011;97(4):e10-5. doi: 10.1700/950.10413

S. Spazzapan, D. Crivellari, P. Bedard, D. Lombardi, G. Miolo, S Scalone, A Veronesi. Therapeutic management of breast cancer in the elderly. *Expert Opin. Pharmacother.* 2011;12(6): 945-60 doi: 10.1517/14656566.2011.540570

G. Miolo, E. Bidoli, D. Lombardi, D.A. Santeufemia, G. Capobianco, F. Dessole, S. Scalone, S. Spazzapan, R. Sorio, G. Tabaro, A. Veronesi. Weekly paclitaxel in heavily pretreated ovarian cancer patients. does this treatment still provide further advantages? *Arch Gynecol Obstet* DOI 10.1007/s00404-011-1976-9 2011

E. Muraro, D. Martorelli, E. Turchet, G. Miolo, S. Scalone, E. Comaro, R. Talamini, K. Mastorci, D. Lombardi, T. Perin, A. Carbone, A. Veronesi, D. Crivellari, R. Dolcetti. A different immunologic profile characterizes patients with HER-2-overexpressing and HER-2-negative locally advanced breast cancer: implications for immune-based therapies. *Breast Cancer Research* 2011, 13:R117 doi:10.1186/bcr3060doi:10.1016/j.critrevonc.2011.12.004

P. Carli, E. Turchet, D. Quitadamo, A. Spada, G. Miolo, E. Lamaj, S. Spazzapan, V. Di Lauro, R. Dolcetti, A. Veronesi, D Crivellari. Target therapy in elderly breast cancer patients. *Crit Rev Oncol/Hematol* 2012;83(3):422-31. doi: 10.1016/j.critrevonc.2011.12.004

Crivellari D, Spazzapan S, Lombardi D, Militello L, Torrisi E, Russo AE, Sorio R, Talamini R, Miolo G, Carli P, Veronesi A. Lapatinib-based therapy in heavily pretreated HER2-positive metastatic breast cancer: a single institution experience. *Tumori*. 2012;98(1):33-8. doi: 10.1700/1053.11497

Santeufemia DA, Capobianco G, Re GL, Miolo G, Fadda GM, Cherchi PL, Tumolo S. Cisplatin-gemcitabine as palliative chemotherapy in advanced squamous vulvar carcinoma: report of two cases. *Eur J Gynaecol Oncol.* 2012;33(4):421-2

Santeufemia DA, Tumolo S, De Paoli A, Lo Re G, Boz G, Miolo G, Baresic T, Basso SM, Innocente R. Chemo/tomotherapy stereotactic body radiation therapy (chemo/SBRT) for the

salvage treatment of esophageal carcinoma following trimodality therapy: a case report. *Tumori.* 2012; 98(5):143e-145e. doi: 10.1700/1190.13217

A. Tuzi, A. Buonadonna, G. Miolo, E. Torrisi, L. Militello, S. Frustaci. Trattamento medico del carcinoma gastrico metastatico. *Eur. J Oncol.*, 2012, vol. 17, n. 2, pp. 65-70

Frustaci S, Buonadonna A, Turchet E, Corona G, Tabaro G, Miolo G, Torrisi E, Lo Re G, Tumolo S, Toffoli G. Phase I trial of docetaxel, oxaliplatin, and capecitabine (DOC) in untreated gastric cancer patients. *Int J Clin Oncol.* 2013;18(3):510-6. doi: 10.1007/s10147-012-0410-z

Santeufemia DA, Lumachi F, Fadda GM, Lo Re G, Miolo G, Basso SM, Chiara GB, Tumolo S. Comment on "Repetitive transarterial chemoembolization (TACE) of liver metastases from gastric cancer: Local control and survival results": Will there be clinical implications in the future? *Eur J Radiol.* 2013;82(9):1591-2. doi.org/10.1016/j.ejrad.2013.04.002

Lestuzzi C, Miolo G, and De Paoli A. Cardiac tumor pathology. Systemic therapy, radiotherapy and cardiotoxicity. 12: 165-182. Basso et al. (eds.) Humana Press 2013 doi 10.1007/978-1-62703-143-1

D. Gasparotto, G. Miolo, E. Torrisi, V. Canzonieri, G. Bertola, M. Libra, A. Marzotto, R. Maestro, A. Buonadonna. Improved outcome with multimodal treatment and imatinib rechallenge in advanced GIST. *Int J Colorectal Dis* (2014) 29:639-640. doi: 10.1007/s00384-014-1838-6

F.M. Elli, L. De Sanctis, E. Peverelli, P. Bordogna, B. Pivetta, G. Miolo, P. Beck-Peccoz, A. Spada, G. Mantovani. Autosomal dominant pseudohypoparathyroidism type Ib: a novel inherited deletion ablating STX16 causes loss of imprinting at the A/B DMR. *J Clin Endocrinol Metab* 2014;99(4):E724-8. doi: 10.1210/jc.2013-3704

G. Corona, J. Polesel, L. Fratino, G. Miolo, F. Rizzolio, D. Crivellari, R. Addobbiati, S. Cervo, G. Toffoli. Metabolomics biomarkers of frailty in elderly breast cancer patients. *J Cell physiol* 2014;229(7):898-902. doi: 10.1002/jcp.24520

P. Carli, S. Spazzapan, L. Militello, G. Miolo, D. Quitadamo, D. Lombardi, E. Torrisi, S. Scalzone, D. Crivellari. Retreatment with trastuzumab after progression on lapatinib-based therapy in heavily pretreated HER2-positive metastatic breast cancer: a single-institution experience. *Tumori.* 2014; 100:501-507

G. Miolo, A. Ash, A. Buonadonna, G. Lo Re, E. Torrisi, S. Cervo, D.A. Santeufemia, A. Tuzi, V. Canzonieri. Grade 4 unclassified renal cell carcinoma with sarcomatoid component expressing S-100 protein. A case report with peculiar diagnostic and therapeutic implications. *Cancer Biology & Therapy:* 20 october 2014 doi. 10.4161/15384047.2014.956642

G. Miolo, E. Muraro, D. Martorelli, D. Lombardi, S. Scalzone, S. Spazzapan, S. Massarut, T. Perin, E. Viel, E. Comaro, R. Talamini, E. Bidoli, E. Turchet, D. Crivellari and R. Dolcetti. Anthracycline-free neoadjuvant therapy induces pathological complete responses by exploiting immune proficiency in HER2+ breast cancer patients *BMC Cancer* 2014, 14:954

C Lestuzzi¹, A De Paoli, T Baresic, G Miolo, A Buonadonna. Malignant cardiac tumors: diagnosis and Treatment *Future Cardiol.* (2015) 11(4), 485–500

E. Muraro, E. Comaro, R. Talamini, E. Turchet G. Miolo, S. Scalzone, L. Militello, D. Lombardi, S. Spazzapan, T. Perin, S. Massarut, D. Crivellari and R. Dolcetti, D. Martorelli. Improved Natural Killer cell activity and retained anti-tumor CD((+)T cell responses contribute to the induction of a pathological complete response in HER2-positive breast

cancer patients undergoing neoadjuvant chemotherapy. *J Transl Med* 2015 27;13:204 doi: 10.1186/s12967-015-0567-0.

G. Toffoli, L. Giordini L, A. Buonadonna A, M. Berretta, A. De Paoli, S. Scalzone, G. Miolo, E. Mini, S. Nobili, S. Lonardi, N. Pella, G. Lo Re, M. Montico, R. Roncato, E. Dreussi, S. Gagno, E. Cecchin. Clinical validity of a DPYD-based pharmacogenetic test to predict severe toxicity to fluoropyrimidines. *Int J Cancer* 2015 15;137(12):2971-80 doi:101002/jc.29654

V. Canzonieri, D. Gasparotto, L. Alessandrini, G. Miolo, E. Torrisi, T. Perin, P. De Paoli, R. Maestro, A. Buonadonna. Morphologic shift associated with aberrant cytokeratin expression in a GIST patient after tyrosine kinase inhibitors therapy. A case report with a brief review of the literature. *Pathol Res Pract* 2016; 212(1):63-7 doi:10.1016/j.prp.2015.11.004

G. Cini, M. Mezzavilla, L. Della Puppa, E. Cupelli, A. Fornasin, A.V. D'Elia, R. Dolcetti, G. Damante, S. Bertok, G. Miolo, R. Maestro, P. de Paoli, A. Amoroso, A. Viel. Tracking of the origin of recurrent mutations of the BRCA1 and BRCA2 genes in the North-East of Italy and improved mutation analysis strategy. *BMC Med Genet* 2016 Feb 6;17:11 doi 10.1186/s12881-016-0274-6.

G. Miolo, L. Del Pup, A. Ash, M. Manno, B. Pivetta, G. Tessitori, G. Corona. Gonadal agenesis with hypoplastic paramesonephric ducts (PMNDs) derivatives in dizygotic twins. *Gynecol Endocrinol* 2016;32(10):792-795

G. Toffoli, M.R. Sharma, E. Marangon, B. Posocco, E. Gray, Q. Mai, A. Buonadonna, B.N. Polite, G. Miolo, G. Tabaro, F. Innocenti. Genotype-Guided dosing study of FOLFIRI plus Bevacizumab in patients with Metastatic Colorectal Cancer. *Clin Cancer Res* 2017 15;23(4):918-924 doi:10.1158/1078-0432.CCR-16-1012

Miolo G, Muraro E, Caruso D, Crivellari D, Ash A, Scalzone S, Lombardi D, Rizzolio F, Giordano A, Corona G . Pharmacometabolomics study identifies circulating spermidine and tryptophan as potential biomarkers associated with the complete pathological response to trastuzumab-paclitaxel neoadjuvant therapy in HER-2 positive breast cancer. *Oncotarget*. 2016 Jun 28;7(26):39809-39822.

Miolo G, Viel A, Canzonier iV, Baresic T, Buonadonna A, SanteufemiaDA, Lara DP, **Corona G**. Association of the germline BRCA2 missense variation Glu2663Lys with high sensitivity to trabectedin-based treatment in soft tissue sarcoma. *Cancer Biol Ther*. 2016 Oct 2;17(10):1017-1021. (IF: 3,294)

L Caggiari, G Miolo, V Canzonieri, M De Zorzi, L Alessandrini, G Corona, R Cannizzaro, D A Santeufemia, A Cossu, A Buonadonna, V De Re. A new mutation of the CDH1 gene in a patient with an aggressive signet-ring cell carcinoma of the stomach *Cancer Biology & Therapy*, DOI: 10.1080/15384047.2017.1394540

L Alessandrini, F Sopracordevole, Giulio Bertola, S Scalzone, M Urbani, G Miolo, Tiziana Perin, F Italia, V Canzonieri. Primary extragenital endometrial stromal sarcoma of the lung: first reported case and review of literature *Diagnostic Pathology* (2017) 12:36 DOI 10.1186/s13000-017-0627-2

G. Miolo, M. Uccello, G. M. Pes, A Buonadonna, G Baldino, F Dessoile, G. Capobianco. Rare late mandibular recurrence of uterine leiomyosarcoma: a case report. *Eur. J. Gynaecol. Oncol.* XXXIX, n , 2018 doi: 10.12892/ejgo4164.2018.

Corona G, Cannizzaro R, Miolo G, Caggiari L, De Zorzi M, Repetto O, Steffan A, De Re V. Use of Metabolomics as a Complementary Omic Approach to Implement Risk Criteria for First-Degree Relatives of Gastric Cancer Patients. *Int J Mol Sci.* 2018 Mar 7;19(3). pii: E750. doi: 10.3390/ijms19030750.

O. Repetto, S. Maiero, R. Magris, G. Miolo , M.R. Cozzi, A. Steffan, V. Canzonieri, R. Cannizzaro, V. De Re Quantitative Proteomic Approach Targeted to Fibrinogen β Chain in Tissue Gastric Carcinoma *Int. J. Mol. Sci.* 2018, 19, 759; doi:10.3390/ijms19030759

L Caggiari, G Miolo, A Buonadonna, D Basile, D A. Santeufemia, A Cossu , G Palmieri , M De Zorzi, M Fornasarig, L Alessandrini, V Canzonieri, G Lo Re, F Puglisi, A Steffan, R Cannizzaro, V De Re Characterizing Metastatic HER2-Positive Gastric Cancer at the CDH1 Haplotype. *Int. J. Mol. Sci.* 2018, 19, 47; doi:10.3390/ijms19010047

Corona G, Gusella M, Gaspardo A, Miolo G, Bertolaso L, Pezzolo E, Pasini F, Steffan A, Caruso D Rapid LC-MS/MS method for quantification of vinorelbine and 4-O-deacetylvinorelbine in human whole blood suitable to monitoring oral metronomic anticancer therapy. *Biomed Chromatogr.* 2018 May 10:e4282. doi: 10.1002/bmc.4282

G. Miolo, M.G. Giuffrida, G. Corona, A.. Capalbo, B. Pivetta, G. Tessitori, L. Bernardini. A novel mosaic 1q32.1 microduplication identified through chromosome microarray analysis: narrowing the smallest critical region including KDM5B gene found associated with neurodevelopmental disorders. *Eur J Med Genet* doi:10.1016/j.ejmg.2018.10.010