

Curriculum Vitae

Antonio Mazzocca, M.D., Ph.D.

Date and Place of Birth: September 23, 1965 - Barletta, Italy
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Education and Training:

1988-1994 M.D., University of Bari, Bari, Italy
1996 - 2000 Ph.D., Clinical Pathophysiology, University of Florence, Florence, Italy

Research and Professional Experience:

1994-1995 Medical Service Corps Officer in the Italian Navy
2001-2004 Postdoctoral Fellow in Cancer Cell Biology, Department of Pathology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA USA
2005-2006 Instructor in Pathophysiology, Department of Internal Medicine, University of Florence, Florence, Italy
2006-2007 Research Fellow – Department of Internal Medicine – University of Florence, Florence, Italy
2007-2009 Instructor in Pathology – Department of Pathology Vanderbilt University School of Medicine, Nashville, TN USA.
2009-2012 Researcher – Department of Emergency and Organ Transplantation, Section of Internal Medicine, Allergology and Clinical Immunology – University of Bari Medical School, Bari, Italy.
2012-present Associate Professor of Gastroenterology – Interdisciplinary Department of Medicine – University of Bari Medical School, Bari, Italy.

Honors and Awards:

2001 Italian Liver Foundation, Grant
2001 European Association for the Study of the Liver, Young Investigator Award
2006 Rotary International Foundation, Lecturer Award
2006 Lions Clubs International, "Melvin Jones" Fellowship Award
2007 Listed in Who's Who in the World, 25th Silver Anniversary Edition, 2008, Marquis Who's Who, New Providence, NJ

Teaching Responsibilities:

2004-2006 Didactic lecture series on various cancer topics, School of Biotechnology University of Florence.
2004-2006 Taught graduate students diagnostic techniques in Pathophysiology, School of Medicine University of Florence.

2004-2006	Supervised Ph.D. students, Doctorate degree course in Clinical and Experimental Medicine, Department of Internal Medicine, University of Florence.
2007-2009	Taught and tutored graduate students as an instructor in the Department of Pathology at Vanderbilt University (USA).
2015-present	Taught graduate students in Methods and Techniques in Cytology and Histology (annual integrated course). School of Medicine at the University of Bari, Bari, Italy
2015-present	Taught graduate students in Methods and Techniques in Microbiology (annual integrated course). School of Medicine at the University of Bari, Bari, Italy
2015-present	Taught graduate students in Methods and Techniques in Histopathology (annual integrated course). Location: School of Medicine at the University of Bari, Bari, Italy

Membership/Services:

Member of the Italian Society of Cancer (SIC)
 Member of the European Association for Cancer Research (EACR)
 Member of the American Association for Cancer Research (AACR)
 Member of the American Association for the Advancement of Science (AAAS)
 Member of the Editorial Board of:

BMC Cancer	2011-present
WMC Plus	2012-present
Frontiers in Gastrointestinal Cancers	2012-present
Dataset Papers in Medicine	2012-present
International Journal of Chronic Diseases	2012-present
BioMed Research International (Hepatology)	2013-present
Hepatoma Research	2014-present
Journal of Gastrointestinal Cancer	2015-present

Reviewer for American Journal of Pathology, Cancer Detection and Prevention, Carcinogenesis, Cell Proliferation, Digestive & Liver Diseases, Gastroenterology, Hepatology, Journal of Hepatology, Journal of Medical Virology, Journal of the National Cancer Institute

Publications:

Sardanelli AM, Technikova-Dobrova Z, Speranza F, **Mazzocca A**, Scacco S, Papa S. Topology of the mitochondrial cAMP-dependent protein kinase and its substrates. *FEBS Lett.* 1996; 396 (2-3): 276-8.

Cotrozzi G, Giusti S, Bini S, Carloni V, **Mazzocca A**, Frati M. Hepatic osteodystrophy in elderly: role of insulin-like growth factor-I and osteocalcin. *J Endocrinol Invest.* 1999; 22 (10 Suppl): 88-9.

Zignego AL, Giannelli F, Marrocchi ME, **Mazzocca A**, Ferri C, Giannini C, Monti M, Caini P, Villa GL, Laffi G, Gentilini P. T(14;18) translocation in chronic hepatitis C virus infection. *Hepatology.* 2000; 31 (2): 474-9.

Carloni V, **Mazzocca A**, Pantaleo P, Cordella C, Laffi G, Gentilini P. The integrin alpha6beta1 is necessary for the matrix-dependent activation of FAK and MAP kinase and the migration of human hepatocarcinoma cells. *Hepatology.* 2001; 34 (1): 42-9.

Mazzocca A, Carloni V, Sciammetta S, Cordella C, Pantaleo P, Caldini A, Gentilini P, Pinzani M. Expression of transmembrane 4 superfamily (TM4SF) proteins and their role in hepatic stellate cell motility and wound healing migration. *J Hepatol.* 2002; 37 (3): 322-30.

Mazzocca A, Giusti S, Hamilton AD, Sebti SM, Pantaleo P, Carloni V. Growth inhibition by the farnesyltransferase inhibitor FTI-277 involves Bcl-2 expression and defective association with Raf-1 in liver cancer cell lines. *Mol Pharmacol*. 2003; 63 (1): 159-66.

Mazzocca A, Carloni V, Ravichandran S. Tetraspanin CD81 is linked to ERK/MAP Kinase signaling by Shc in liver tumor cells. *Oncogene*, 2004; 23 (8): 1566-74.

Mazzocca A, Cappadona Sciammetta S, Carloni V, Cosmi L, Annunziato F, Harada T, Abrignani S, Pinzani M. Binding of hepatitis C virus envelope protein E2 to CD81 up-regulates MMP-2 in human hepatic stellate cells. *J Biol Chem*. 2005 Mar 25; 280 (12): 11329-39.

Mazzocca A, Coppari R, De Franco R, Cho JY, Libermann T A, Pinzani M, Toker A. A secreted form of ADAM9 promotes carcinoma invasion through tumor-stromal Interactions. *Cancer Res*. 2005 Jun 1; 65 (11): 4728-38.

Novo E, Marra F, Zamara E, Valfrè di Bonzo L, Monitillo L, Cannito S, Petrai I, **Mazzocca A**, Bonacchi A, De Franco R S M, Colombatto S, Autelli R, Pinzani M, Parola M. Overexpression of bcl-2 by activated human hepatic stellate cells: resistance to apoptosis as a mechanism of progressive hepatic fibrogenesis in humans. *Gut*. 2006 Aug; 55 (8): 1174-82.

Mazzocca A, Liotta F, Carloni V. Tetraspanin CD81-regulated cell motility plays a critical role in intrahepatic metastasis of hepatocellular carcinoma. *Gastroenterology*. 2008 Jul; 135 (1): 244-256.

Fransvea E*, **Mazzocca A***, Antonaci S, Giannelli G. Targeting TGF- β 1 inhibits activation of β 1 integrin and blocks vascular invasion in hepatocellular carcinoma. *Hepatology*. 2009 Mar; 49 (3):839-850.*these authors contributed equally to this work.

Trerotoli P, Fransvea E, Angelotti U, Antonaci G, Lupo L, **Mazzocca A**, Mangia A, Antonaci S, Giannelli G. Tissue expression of squamous cellular carcinoma antigen (SCCA) is inversely correlated to tumor size in hepatocellular carcinoma. *Mol Cancer*. 2009 May 27; 8(1): 29.

Mazzocca A, Fransvea E, Lavezzari G, Antonaci S, Giannelli G. Inhibition of transforming growth factor beta receptor I kinase blocks hepatocellular carcinoma growth via neo-angiogenesis regulation. *Hepatology*. 2009 Oct; 50 (4): 1140-51.

Mazzocca A, Giannelli G, Antonaci S. A novel method in order to evaluate the efficacies and the safeties of new drugs for hepatocellular carcinoma with loss of transforming growth factor-beta signaling. *Hepatology*. 2009 Dec; 50 (6): 2050-1.reply

Mazzocca A, Fransvea E, Di turi F, Lupo L, Antonaci S, Giannelli G. Down-regulation of connective tissue growth factor by inhibition of TGF- β blocks the tumor-stroma cross-talk and tumor progression in HCC. *Hepatology*. 2010 Feb; 51 (2): 523-34.

Fransvea E, **Mazzocca A**, Santamato, Antonaci S, Giannelli. Kinase activation profile associated with TGF- β dependent migration of HCC cells. *Cancer Chemother Pharmacol*. 2011 Jul;68(1):79-86.

Daniele A, Zito AF, Giannelli G, Divella R, Asselti M, **Mazzocca A**, Paradiso A, Quaranta M. Expression of metalloproteinases MMP-2 and MMP-9 in sentinel lymph node and serum of patients with metastatic and non-metastatic breast cancer. *Anticancer Res*. 2010 Sep; 30 (9): 3521-7.

Peng WM, Yu CF, Kolanus W, **Mazzocca A**, Bieber T, Kraft S, Novak N. Tetraspanins CD9 and CD81 are molecular partners of trimeric Fc ϵ RI on human antigen-presenting cells. *Allergy*. 2011 May; 66 (5): 605-11. doi: 10.1111/j.1398-9995.2010.02524.x.

Mazzocca A, Dituri F, Lupo L, Quaranta M, Antonaci S, Giannelli G. Tumor-secreted lysophosphatidic acid accelerates HCC progression by promoting differentiation of peritumoral fibroblasts in myofibroblasts. *Hepatology*. 2011 Jun 14. doi: 10.1002/hep.24485.

Dituri F, **Mazzocca A**, Lupo L, Edling C, Azzariti A, Antonaci S, Falasca M, Giannelli G. PI3K class 1B controls the cell cycle checkpoint promoting cell proliferation in hepatocellular carcinoma. *Int J Cancer*. 2012 Jun 1; 130 (11): 2505-13. doi: 10.1002/ijc.26319.

Mazzocca A, Giannelli G. Plasma lysophosphatidic acid levels and hepatocellular carcinoma. *Hepatology*. 2013 Jan;57(1):418-9. doi: 10.1002/hep.25883.

Carlioni V, **Mazzocca A**, Mello T, Galli, Capaccioli S. Cell fusion promotes chemoresistance in metastatic colon carcinoma. *Oncogene*. 2012 Jul 2. doi: 10.1038/onc.2012.268.

Divella R, **Mazzocca A**, Gadaleta C, Simone G, Paradiso A, Quaranta M, Daniele A. Influence of plasminogen activator inhibitor-1 (SERPINE1) 4G/5G polymorphism on circulating SERPINE-1 antigen expression in HCC associated with viral infection. *Cancer Genomics Proteomics*. 2012 Jul; 9 (4): 193-8.

Fransvea E, Trerotoli P, Sacco R, Bernabucci V, Milella M, Napoli N, **Mazzocca A**, Renna E, Quaranta M, Angarano G, Villa E, Antonaci S, Giannelli G. SCCA-IC serum levels are predictive of clinical response in HCV chronic hepatitis to antiviral therapy: a multicentric prospective study. *J Viral Hepat*. 2012 Oct; 19 (10): 704-710. doi: 10.1111/j.1365-2893.2012.01604.x.

Foti C, Antelmi A, **Mazzocca A**, Vella FS, Romita P, Pugliese S, Lomazzo D, Portincasa P, Palasciano G. Drug reaction with eosinophilia and systemic symptoms caused by lenalidomide. *Eur J Dermatol*. 2012 Nov-Dec; 22 (6): 799-800. doi: 10.1684/ejd.2012.1853.

Daniele A, Divella A, Trerotoli P, Caringella ME, Paradiso A, Casamassima P, Abbate I, Quaranta M, **Mazzocca A**. Clinical usefulness of cancer antigen 15-3 in breast cancer patients before and after surgery. *The open Breast Cancer J*. 2013 Feb; 13 (5): 1-6. doi: 10.2174/1876817201305010001.

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Mazzocca A, Tahmasebi Birgani M, Sabbà C, Carlioni V. Tetraspanin-enriched microdomains and hepatocellular carcinoma progression. *Cancer Lett*. 2014 May 23. pii: S0304-3835(14)00273-0. doi: 10.1016/j.canlet.2014.05.016.

Divella R, Daniele A, Abbate I, Bellizzi A, Savino E, Simone G, Giannone G, Giuliani F, Fazio V, Gadaleta-Caldarola G, Gadaleta CD, Lolli I, Sabbà C, **Mazzocca A**. The presence of clustered circulating tumor cells (CTCs) and circulating cytokines define an aggressive phenotype in metastatic colorectal cancer. *Cancer Causes Control*. 2014 Nov; 25(11): 1531-41. doi: 10.1007/s10552-014-0457-4.

Mazzocca A, Dituri F, De Santis F, Filannino A, Lopane C, Betz RC, Li YY, Mukaida N, Winter P, Tortorella C, Giannelli G, Sabbà C. Lysophosphatidic acid receptor LPAR6 supports the tumorigenicity of hepatocellular carcinoma. *Cancer Res*. 2015 Feb 1; 75(3): 532-43.

Divella R, Daniele A, Abbate I, Savino E, Simone G, Fazio V, Gadaleta-Caldarola G, Gadaleta CD, Sabbà C, **Mazzocca A**. Circulating levels of PAI-1 are predictive of poor prognosis in HCC patients harboring SERPINE1 4G/4G polymorphism undergoing TACE. *Transl Oncol*. 2015. In press.

Gadaleta-Caldarola G, Divella R, **Mazzocca A**, Daniele A, Sabbà C, Brandi M. Sorafenib: the gold standard therapy in advanced HCC and beyond. *Transl Oncol*. 2015. (submitted).

Palmer TD, **Mazzocca A**, Hebron KE, Hansen AG, Ashby WJ, Swart GW, Zijlstra A. CD151 and ALCAM control tumor cell migration via PKC-mediated activation of Rap1. *J Cell Sci.* 2015. (submitted).

Reviews, Chapters, and Editorials

Ingordo V, **Mazzocca A**, Simone N, Mosca ME, Fracchiolla S, Tamburelli A, Maffeo N. The onychomycoses in young Italian men: An epidemiologic study on a representative sample of population. *G Ital Dermatol Venereol.* 1999; 134 (4), pp. 295-298.

Pinzani M, Carloni V, **Mazzocca A**. Cell adhesion and growth factor co-signalling. In *Cell Adhesion Molecules in Health and Disease*. Book Series: Falk Symposium. (eds.) Reutter W, Schuppan D, Tauber R, Zeitz M. Springer: Berlin, 2003.

Mazzocca A, Carloni V. The metastatic disease: therapeutic opportunities from cancer biology and pharmacological challenges. *Curr Med Chem.* 2009; 16 (14): 1704-17.

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Giannelli G, **Mazzocca A**, Fransvea E, Mascolo A, Antonaci S. New therapeutic perspectives in hepatocellular carcinoma. *Tutto Sanità – Quaderni Scientifici.* Anno II - n.12 - Marzo 2011.

Giannelli G, **Mazzocca A**, Fransvea E, Antonaci S. Targeting TGF- β 1 as a new therapeutic strategy in hepatocellular carcinoma. *Biochim Biophys Acta - Review on cancer.* 2011 Apr; 1815 (2): 214-23.

Dituri F, **Mazzocca A**, Giannelli G, Antonaci S. PI3K functions in cancer progression, anticancer immunity and immune evasion by tumors. *Clin Dev Immunol.* 2011; 2011:947858. Epub 2011 Oct 20.

Mazzocca A, Antonaci S, Giannelli G. The TGF- β signalling pathway as pharmacological target in hepatocellular carcinoma *Curr Pharm Des.* 2012 May 22.

Mazzocca A, Tahmasebi Birgani M, Sabbà C, Carloni V. Tetraspanin-enriched microdomains and hepatocellular carcinoma progression. *Cancer lett.* 2014 May 23. pii: S0304-3835(14)00273-0. doi: 10.1016/j.canlet.2014.05.016.

Mazzocca A, Tahmasebi Birgani M, Sabbà C, Carloni V. Tetraspanin-enriched microdomains and hepatocellular carcinoma progression. *Cancer lett.* 2014 May 23. pii: S0304-3835(14)00273-0. doi: 10.1016/j.canlet.2014.05.016.

Gadaleta-Caldarola G, Infusino S, Divella R, Ferraro E, **Mazzocca A**, De Rose F, Filippelli G, Abbate I, Brandi M. Sorafenib: 10 years after the first pivotal trial. *Future Oncol.* 2015 Jul; 11(13): 1863-80. doi: 10.2217/fon.15.85.

Gadaleta-Caldarola G, Divella R, **Mazzocca A**, Infusino S, Ferraro E, Filippelli G, Daniele A, Sabbà C, Abbate I, Brandi M. Sorafenib: the gold standard therapy in advanced hepatocellular carcinoma and beyond. *Future Oncol.* 2015 Aug;11(16):2263-6. doi: 10.2217/fon.15.161.

Mazzocca A, Agosti P, Sabbà C. *Pathobiology of hepatocellular carcinoma and clinical impact*. Softcover Book. Nova Publisher: Hauppauge NY, 2015. In press.