

BIOGRAPHICAL SKETCH

NAME: Gennari, Alessandra

eRA COMMONS USER NAME (credential, e.g., agency login): NA

POSITION TITLE: Full Professor of Oncology

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Genoa, Italy	PhD	Nov/2009	Molecular Epidemiology and Biostatistics
University of Pisa, Italy	Specialization	Nov/2001	Medical Oncology
University of Pisa, Italy	Specialization	Nov/1996	Sports Medicine
Sant'Anna School of Advanced Studies Pisa, Italy	PhD	Mar/1993	Experimental Medicine
University of Pisa, Italy	Medical Degree	Oct/1988	Medicine and Surgery

A. Personal Statement

I am a Full Professor of Oncology at the University of Eastern Piedmont (Università del Piemonte Orientale, UPO) and Director of the Division of Oncology at the University Hospital in Novara, Italy. With a strong background in clinical and translational research, my work has primarily focused on optimizing treatment strategies, evaluating the metabolic and immunological aspects of cancer progression, and advancing personalized therapeutic approaches.

I hold two PhDs: one in Biomedical Research from the Sant'Anna School of Advanced Studies in Pisa (1993), and another in Molecular Epidemiology and Biostatistics from the University of Genoa (2009). I also specialized in Sports Medicine (1996) and Medical Oncology (2001), gaining extensive expertise in cancer treatment and clinical epidemiology.

Over the years, I have held academic and research positions at several prestigious institutions in Italy and abroad, including the University of Pisa, the University of Heidelberg (Germany), the National Cancer Institute in Genoa, and the International Breast Cancer Study Group (IBCSG). Since 2023, I have served as Full Professor at UPO, and beginning in 2025, I will also act as the University Rector's Delegate for Third Mission, Public Engagement, Technology Transfer, and Citizen Science.

My research has significantly contributed to the advancement of breast cancer treatment, especially in the areas of metabolism, immune-oncology, and the management of early and metastatic disease. I have led and coordinated numerous clinical trials, including phase II and III studies, many of which have informed international treatment guidelines.

I was among the first to explore metabolic interventions in breast cancer, investigating the role of insulin resistance, metformin, and host-related factors in modulating treatment response. My recent research focuses on immune-related biomarkers as predictors of response to immunotherapy, particularly in triple-negative breast cancer (TNBC), and on developing predictive algorithms and risk assessment models that integrate omics technologies and immune profiling.

My work has resulted in over 200 peer-reviewed publications in high-impact journals and multiple book chapters. I was the first author of the 2021 ESMO Metastatic Breast Cancer Guidelines and have played a key role in the development of several international breast cancer guidelines.

I am an active member of leading oncology societies, including the European Society for Medical Oncology (ESMO), and serve as a Faculty Member for Breast Cancer and Clinical Practice Guidelines for the American Society of Clinical Oncology (ASCO), the Italian Association of Medical Oncology (AIOM), and the New England Cancer Society (Honorary Member).

In addition, I serve on the editorial boards of major oncology journals, including the British Journal of Cancer, Annals of Oncology, The Lancet Oncology, and Journal of Clinical Oncology. Throughout my career, I have collaborated with prominent international institutions and research

consortia, such as the IBCSG and the Institut National du Cancer (France), contributing to global advances in breast cancer research.

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

From 2025	University of Eastern Piedmont Rector Delegate for third mission, public engagement, transfer technology and citizen science
From 2023	Full Professor of Oncology at the University of Eastern Piedmont Director Division of Oncology at the University Hospital, Novara Italy
2018-2022	Associate Professor of Oncology at the University of Eastern Piedmont Director Division of Oncology at the University Hospital, Novara Italy
2009-2018	Assistant, Division of Medical Oncology, Ente Ospedaliero Galliera, Genova, Italy
2009- 2017	Assistant, Division of Medical Oncology, Galliera Hospital, Genoa, Italy
2005-2008	Senior Researcher, Department of Clinical Epidemiology and Biostatistics, National Cancer Institute, Genoa, Italy
2001-2004	Assistant, Division of Medical Oncology, St Chiara University Hospital, Pisa Italy
1996-2001	Fellow, Division of Medical Oncology, St.Chiera University Hospital, Pisa Italy
1992-1995	Fellow, Institute of Internal Medicine, University of Pisa, Italy
1991-1992	PhD fellow, Institute of Clinical Physiology, University of Milan, Milano, Italy
1990-1991	PhD fellow, Human Physiology, University of Heidelberg,
1988-1990	PhD fellow, Institute of Physiology, University of Pisa, Italy

Professional membership

2021	First author of ESMO Metastatic Breast Cancer Guidelines Member of the ABC (Advanced Breast Cancer) Consensus Panel Honorary Member of New England Cancer Society (NECS)
2021	Consultant at the IRCCS IRST National Cancer Institute of Romagna, Meldola, (FC) Italy, for clinical and traslational research in breast cancer
2007-2018	
2010-2013	Member of the International scientific committee - "Comitè International de Recherche Clinique en Cancerologie (CIR2C)" of the Institut National du Cancer, Ministry of Health, France

Honors

2022 - 2024	Research Grant from Italian Ministry of University and research PRIN 2022 - Evaluation of host and tumor related metabolic asset as possible predictive and prognostic factors in early breast cancer patients candidate to neoadjuvant therapy. Role Principal Investigator
2020 - 2025	Research Grant funded by Italian Association for Cancer Research (AIRC 2020) - Predictor of response to immunotherapy in Triple Negative Breast Cancer: Study of innate and adaptive immunity. Role Principal Investigator.
2019	Research Grant funded by University of Eastern Piedmont – MIUR Department of Excellence 2019 – Implementation of a clinical and Traslational Platform to optimise complex or target directed treatments in the aging cancer patient. Role Principal Investigator
2013 - 2019	Research Grant funded by Italian association for cancer research (AIRC) titled “Development of a predictive algorithm of endocrine responsiveness in ER + metastatic breast cancer”
2011	ERA-NET on Translational Cancer Research JTC 2011 (European TRANSCAN project) - Early prediction of efficacy of endocrine therapy in breast cancer: pilot study and validation with 18F Fluoroestradiol (ET_FES). Role Principal Investigator
2011	Research Grant funded by the Guido Berlucci Foundation Research Projects 2011 - Development of a clinic algorithm to evaluate the cardiovascular toxicity risk in cancer patients receiving antineoplastic treatments. Role Principal Investigator.
2009	Research Grant funded by the Italian Ministry of Health Ricerca Finalizzata 2009 - Ovarian stimulation for infertility and cancer risk: an italian cohort study. Role Principal Investigator

2009 - 2013	Research Grant funded by the Italian Association for Cancer Research (AIRC 2009) - Metformin plus chemotherapy in advanced breast cancer: prognostic and predictive tools. Role Principal Investigator
2008	Research Grant funded by the Italian League for the Fight against Tumors LILT - Prevalence of insulin resistance in early breast cancer patients. Role Principal Investigator

C. Contributions to Science

Most relevant to current application

1. Cattrini, C, España, R, Mennitto, A, Bersanelli, M, Castro, E, Olmos, D, Lorente, D, **Gennari, A**. "Optimal Sequencing and Predictive Biomarkers in Patients with Advanced Prostate Cancer". *Cancers (Basel)*. 2021 Sep 8;13(18):4522.
2. Cattrini C, Manfredi M, Barboro P, Ghirimoldi M, Mennitto A, Martini V, Battioni A, Le Van M, Gobbato S, Branni C, Ayed RB, Pinato DJ, Catalano F, Zanardi E, Boccardo F, **Gennari A**. "Untargeted lipidomics reveal association of elevated plasma C18 ceramide levels with reduced survival in metastatic castration-resistant prostate cancer patients". *Sci Rep*. 2023 Oct 18;13(1):17791.
3. Provinciali N, Piccininno M, Siri G, **Gennari A**, Antonucci G, Ricci D, Devoto E, Miceli R, Cortesi P, Pazzi C, Nanni O, Mannozi F, Pastina I, Messuti L, Bengala C, Frassinetti GL, Cattrini C, Fava M, Buttiron Webber T, Briata IM, Corradengo D, DeCensi A, Puntoni M. "Serum Biomarkers to Dynamically Predict the Risk of Cardiovascular Events in Patients under Oncologic Therapy. A Multicenter Observational Study". *Rev Cardiovasc Med*. 2024 Jul 9;25(7):256.
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5. Colciago RR, Lancellotta V, De Santis MC, Bonzano E, De Rose F, Rocca E, Meduri B, Pasinetti N, Prisco A, **Gennari A**, Tramm T, Di Cosimo S, Harbeck N, Curigliano G, Poortmans P, Meattini I, Franco P."The role of radiation therapy in the multidisciplinary management of male breast cancer: A systematic review and meta-analysis on behalf of the Clinical Oncology Breast Cancer Group (COBCG)." *Crit Rev Oncol Hematol*. 2024 Dec;204:104537.
6. **A Gennari**, M Sormani, M Puntoni, V Martini, A Amaro, P Bruzzi, U Pfeffer (2021). Identification of a prognostic signature based on the expression of genes related to the insulin pathway in early breast cancer. *BREAST CARE*, vol. 16, p. 299-306, ISSN: 1661-3791.
7. Bottosso M, Sandoval RL, Verret B, Polidorio N, Caron O, **Gennari A**, Bychkovsky BL, Cahill SH, Achatz MI, Guarneri V, André F, Garber JE."HER2 status and response to neoadjuvant anti-HER2 treatment among patients with breast cancer and Li-Fraumeni syndrome." *Eur J Cancer*. 2024 Nov;211:114307.
8. Zambelli A, Cortesi L, Gaudio M, Arpino G, Bianchini G, Caruso F, Cinieri S, Curigliano G, Del Mastro L, De Placido S, Fabi A, Fortunato L, Generali D, **Gennari A**, Gori S, Grandi G, Guarneri V, Klinger M, Livi L, Marchiò C, Palumbo I, Panizza P, Pravettoni G, Prunerì G, Puglisi F, Sapino A, Tinterri C, Turchetti D, De Laurentiis M. "Parp-inhibitors in the therapeutic landscape of breast cancer patients with BRCA1 and BRCA2 pathogenic germline variants: An Italian consensus paper and critical review." *Cancer Treat Rev*. 2024 Nov;130:102815.
9. Conte P, Ciruelos E, Curigliano G, De Laurentiis M, Del Mastro L, **Gennari A**, Llombart A, Martìn M, Poggio F, Prat A, Puglisi F, Saura C. "Positioning of tucatinib in the new clinical scenario of HER2-positive metastatic breast cancer: An Italian and Spanish consensus paper". *Breast*. 2024 Aug;76:103742.
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 13. Dri A, Arpino G, Bianchini G, Curigliano G, Danesi R, De Laurentiis M, Del Mastro L, Fabi A, Generali D, **Gennari A**, Guarneri V, Santini D, Simoncini E, Zamagni C, Puglisi F. “Breaking barriers in triple negative breast cancer (TNBC) - Unleashing the power of antibody-drug conjugates (ADCs).” *Cancer Treat Rev.* 2024 Feb;123:102672.
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Complete List of Published Work in MyBibliography:

<https://pubmed.ncbi.nlm.nih.gov/?term=Gennari+Alessandra&sort=date>