Alessandra Gennari MD PhD
Full Professor of Oncology, University of Piemonte Orientale, Novara, IT

EDUCATION

1988	Medical Degree cum laude, School of Medicine and Surgery, University of Pisa, Italy
1993	PhD in Biomedical Research, Sant'Anna School of Advanced Studies - Pisa, Italy
1996	Specialty in Sports Medicine, School of Medicine, University of Pisa, Italy
2001	Specialty in Medical Oncology, School of Medicine, University of Pisa, Italy
2009	PhD in Molecular Epidemiology and Biostatistics, University of Genoa, Italy

POSITIONS AND HONORS

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

OTHER EXPERIENCES:
- From 2007 to 2018 Consultant at the IRCCS IRST National Cancer Institute of Romagna, Meldola, (FC) Italy, for clinical and traslational research in breast cancer
- Member of the Scientific Board of the International Breast Cancer Study Group/BIG
- 2010 to 2013 Member of the International scientific committee - "Comitè International de Recherche Clinique en Cancerologie (CIR2C)" of the Institute National du Cancer, Ministry of Health, France

- Member of the Editorial Team (Clinical Editor) of the Cochrane Breast Cancer Group.
- ESMO faculty member for the Breast cancer faculty group and Clinical Practice Guidelines
- Member of the ABC (Advanced Breast Cancer) Consensus Panel. (2021)
- First author of ESMO Metastatic Breast Cancer Guidelines 2021

SCIENTIFIC AFFILIATIONS:
- Italian Association Medical Oncology (AIOM)
- European Society Medical Oncology (ESMO)
- American society Medical Oncology (ASCO)
- New England Cancer Society (Honorary Member).

EDITORIAL REVIEWER BOARD:
British Journal of Cancer, Cancer Letter, The Breast, Breast Cancer Research and Treatment, Journal of the National Cancer Institute, Clinical Breast Cancer, Cancer Letter, Annals of Oncology, European Journal of Cancer, Lancet Oncology, Journal of Clinical Oncology, Heart, Cancers, Jama Oncology, Nature.

PEER REVIEWED RESEARCH GRANTS:
1. Lega Italiana per la Lotta contro i Tumori (LILT) 2008- Prevalence of insulin resistance in early breast cancer patients. Role Principal Investigator
2. Italian Association for Cancer Research (AIRC 2009) - Metformin plus chemotherapy in advanced breast cancer: prognostic and predictive tools. Role Principal Investigator
3. Italian Ministry of Health Ricerca Finalizzata 2009 - Ovarian stimulation for infertility and cancer risk: an italian cohort study. Role Principal Investigator
4. Guido Berlucchi Foundation Research Projects 2011 - Development of a clinic algorithm to evaluate the cardiovascular toxicity risk in cancer patients receiving antineoplastic treatments. Role Principal Investigator
5. 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
6. Italian Association for Cancer Research (AIRC 2013) – Development of a prediction algorithm of endocrine responsiveness in ER+ metastatic breast cancer. Role Principal Investigator.
7. 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
8. 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.
9. 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

RESEARCH EXPERIENCE:
During her career she has been involved in the development of new treatment strategies and treatment individualization with particular emphasis on breast cancer. She has coordinated and performed as Principal Investigator many clinical trials in early and advanced breast cancer in a multidisciplinary setting, including translational laboratory research.

Other accomplishments have been:

1. The optimization of combination chemotherapy including new active agents with pharmacokinetic/pharmacodynamic monitoring, funded by the Italian Association for Cancer Research AIRC (J Clin Oncol 15,2510-17,1997; Clin Pharmacokin 37:195-201,1999; Breast Cancer Res Treat. 68:171-179,2001; Ann Oncol. 62:919-927,2002; Clin Pharmacokinet. 41:431-444,2002; Br J Clin Pharmacol.3:508-518,2002; Br J Cancer 90:31-35,2004)

2. The demonstration of the role of cardiac risk factors on the cardiotoxicity of epirubicin/paclitaxel-containing regimens (J Clin Oncol.17:3596-3602, 1999)

4. The first evidence of the efficacy and safety of anthracycline re-challenge in metastatic breast cancer patients receiving an anthracycline/taxane combination (Br J Cancer 90:962-967, 2004)

5. The demonstration of the prognostic impact of the inclusion of new agents in the treatment of advanced breast cancer, over a 20 year period (Cancer 104: 1742-1750, 2005)

6. The role of maintenance chemotherapy in metastatic breast cancer patients responding to anthracycline/taxane first line therapy, (J Clin Oncol 2006 and J Clin Oncol 2011 incorporated into the NCCN guidelines for the treatment of breast cancer).

7. Evaluation of the combination of epirubicin with low-dose herceptin in HER-2-positive metastatic breast cancer. (Breast Cancer Research and Treatment, 2008)

8. Evaluation of the antiproliferative activity of metformin single agent, in a preoperative, window of opportunity trial, published on J Clin Oncol 2012, in collaboration with the European Institute of Oncology, Milan, Italy

9. Evaluation of the combination of Metformin plus chemotherapy in advanced breast cancer: prognostic and predictive tools Role Principal Investigator funded by AIRC – IG 2009 (Italian Association for Cancer Research). The results of the clinical study (Task 1) were published in Breast Cancer Research and Treatment 2019. Task 2 evaluated the effect of metformin on circulating tumor cells CTCs (published on Breast Cancer Research and Treatment 2020). Task 3 is dedicated to the development and validation of a prognostic score based on the "Insulin Sensitivity Score", published in Breast Care 2020.

10. Evaluation of new maintenance schedules in metastatic breast cancer. Study Chair of the International Breast Cancer Study Group IBCSG 42-12 SNAP Trial. The SNAP trial is a randomized phase II study evaluating different schedules of nab-Paclitaxel in metastatic breast cancer (Annals Oncology 2019).

11. Predictor of response to immunotherapy in Triple Negative Breast Cancer: Study of innate and adaptive immunity, funded by AIRC – IG 2020 (Italian Association for Cancer Research). This project is composed of 4 Task that will evaluate: 1. evaluation of the predictive role of Extracellular Vescicles (EVs) mediated cross-talk and PBMC through single-cell analysis; 2. predictive value of innate and adaptive immunity in tissue samples; 3. development of a predictive algorithm of responsiveness to chemo-immunotherapy in Triple Negative MBC, based on the different immune components from blood and tissue and clinical and biological information; 4. Characterization of the immune repertoire in the tumor microenvironment using a high-parameter imaging solution (Hyperion Imaging System) at subcellular resolution.

She has published more than 200 articles in peer reviewed journals as well as book chapters.

Current Research Areas:
- Metabolic aspects in breast cancer patients, with particular emphasis on body weight, diet, physical activity in early and metastatic disease.
- Evaluation of the role of innate and adaptive immunity in early and advanced breast cancer.

- Evaluation of T-cell senescence as a predictive factor in early breast cancer patients receiving neoadjuvant therapy.
- Application of -omics assays to evaluate the potential predictive and prognostic impact of host-related -omic profiles in breast and lung cancer patients.

Novara, 02/09/2025   Alessandra Gennari