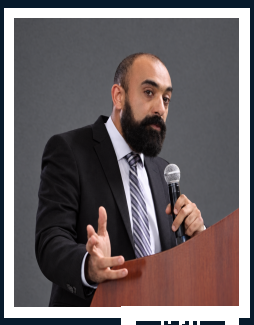
CURRICULUM VITAE

Mohamed Aimene Melzi

Medical Oncologist · Clinical Researcher · Data Scientist

Blida · Algeria · melzi.xyz/home/



Updated profile
melzi.xyz

PROFILE

Dr Mohamed Aimene Melzi is a medical oncologist, academic clinician and clinical research methodologist. He practices at the Blida Cancer Centre and is involved in teaching and research activities at the Faculty of Medicine, University of Blida 1, Algeria. His professional work lies at the intersection of clinical oncology, clinical research and health data science. His main areas of interest include real-world evidence, cancer epidemiology, clinical research methodology, biostatistics and data science applied to oncology. He contributes to the design and coordination of observational studies, cohorts and multicenter research projects, covering the full research workflow from protocol development and data collection tools to data management, statistical analysis and scientific dissemination. A substantial part of his work focuses on describing cancer care pathways and treatment outcomes in routine clinical practice, with particular emphasis on generating evidence relevant to the Algerian healthcare context. His research interests include breast and lung cancers, bone metastases, systemic anticancer therapies and prognostic factors in oncology. He also develops methodological approaches combining clinical research, statistical programming and data visualization to transform routinely collected healthcare data into scientifically robust and clinically meaningful evidence. Through his clinical, academic and research activities, he aims to contribute to the development of high-quality oncology research that is methodologically rigorous, data-driven and closely connected to the challenges encountered in everyday cancer care.

PROFESSIONAL EXPERIENCE

Present — **Medical Oncologist**
Anti-Cancer Centre of Blida · Department of Medical Oncology
Clinical practice in medical oncology.

2014 - Present — **Assistant Professor / Hospital-University Faculty**
University of Blida 1 · Faculty of Medicine
Teaching and academic activity in medical oncology.

Present — **Clinical Research Officer**
EHS en LCC de Blida
Clinical research coordination, methodology and real-world oncology research.

EDUCATION

2009 — **Doctor of Medicine (MD)**
University of Blida 1 · Medicine

2012 - 2012 — **CESAM**
Institut Pasteur d'Algérie · Biostatistics

2013 — **Specialist in Medical Oncology**
University of Blida 1 · Medical Oncology

SKILLS

Medical Oncology
Medical management of solid tumors, integrating systemic treatment strategies, prognostic assessment, follow-up and coordination of the oncology care pathway.

Clinical Research
Design, coordination and analysis of clinical and observational studies, from protocol development to interpretation and scientific dissemination of results.

Biostatistics
Application of statistical methods to biomedical research, including descriptive and inferential analyses, regression models, multivariable modeling, validation and interpretation of results.

Real-World Evidence & Data Science
Use of routinely collected healthcare data to generate real-world evidence by combining clinical methodology, programming, statistical analysis and data science.

Python
Use of Python for data processing, statistical analysis, workflow automation, visualization and development of reproducible research tools.

Clinical Data Management
Structuring, quality control, cleaning and transformation of clinical data to ensure consistency, traceability and readiness for statistical analysis.

Survival Analysis
Analysis of time-to-event data using methods such as Kaplan-Meier estimation, Cox regression, RMST and approaches adapted to competing risks.

Deep Learning
Application of deep neural networks to complex data analysis, including pattern recognition, classification and automated extraction of relevant information.

Machine learning
Development and evaluation of machine learning models for clinical, prognostic and real-world data analysis, with particular emphasis on validation, interpretability and predictive performance.

Data Visualization
Design of scientific and interactive visualizations to explore, summarize and clearly communicate complex data and statistical findings.

Modelization
Development of statistical and predictive models to investigate associations, identify prognostic factors and estimate risks or clinical events over time.

RESEARCH INTERESTS

Clinical Research and Real-World Oncology
Design and analysis of clinical and observational studies aimed at better characterizing care pathways, treatment strategies, clinical outcomes and prognostic determinants in routine oncology practice.

Cancer Epidemiology
Study of cancer distribution, clinical and biological characteristics, patterns of care and outcome variability, with particular interest in evidence generated within the Algerian healthcare context.

Breast Cancer
Research on tumor characteristics, biological subtypes, systemic therapies and treatment outcomes in breast cancer, particularly in neoadjuvant, HER2-positive and locally advanced settings.

Lung Cancer
Investigation of clinical, histological and molecular characteristics of lung cancer, access to molecular testing and precision therapies, and outcomes observed in routine clinical practice.

Bone Metastases and Skeletal Events
Study of prognosis in patients with bone metastases, skeletal-related events, predictive factors and the impact of tumor and clinical characteristics on survival and disease progression.

Prognostic and Predictive Factors
Identification and validation of clinical, biological and treatment-related factors associated with prognosis, treatment response and clinical outcomes using multivariable and predictive modeling approaches.

Methodology, Biostatistics and Survival Analysis
Development and application of statistical methods tailored to oncology data, including regression modeling, survival analysis, competing risks, restricted mean survival time and validation of prognostic models.

Real-World Evidence and Data Science
Use of routinely collected clinical data to generate robust, reproducible and clinically relevant real-world evidence for decision-making and healthcare improvement.

Data Quality and Reproducible Research
Structuring, quality control and standardization of clinical data, with an emphasis on reproducible analytical workflows, traceability and the integration of data management into clinical research.

Machine Learning for Clinical Data
Exploration of machine learning approaches for prognostic stratification, prediction of clinical outcomes and identification of complex patterns within heterogeneous oncology datasets.

AFFILIATIONS

EHS en LCC de Blida
Department of Medical Oncology / Clinical Research

University of Blida 1 - Faculty of Medicine
Faculty member

Laboratoire de Recherche en Cancérologie - Université Blida 1
Research affiliation

LANGUAGES

French
Professional / fluent

Arabic
Professional / fluent

English
Scientific / professional use

RESEARCH PROJECTS

SAFRO - Programme de recherche oncologique en vie réelle
SAFRO
Programme multicentrique algérien de recherche en vie réelle visant à documenter la présentation, la prise en charge et les résultats des cancers en pratique courante.

RETROBREAST - Real-world breast cancer research programme
RETROBREAST
Programme de recherche en vie réelle consacré aux caractéristiques, parcours thérapeutiques et résultats du cancer du sein en Algérie.

NEOTRAPSCAL - Neoadjuvant subcutaneous pertuzumab-trastuzumab in HER2-positive breast cancer
NEOTRAPSCAL
Étude multicentrique en vie réelle évaluant la réponse pathologique complète après traitement néoadjuvant par pertuzumab-trastuzumab sous-cutané à dose fixe associé à la chimiothérapie.

Cohorte prospective des métastases osseuses - facteurs pronostiques et événements osseux

MO-COHORT

Cohorte prospective monocentrique étudiant les facteurs pronostiques chez des patients atteints de tumeurs solides avec métastases osseuses.

BCA RWD - Breast Cancer Real-World Data

BCA-RWD

Projet de recherche en données de vie réelle sur le cancer du sein, structuré autour du parcours réel de la patiente et d'un eCRF détaillé.

BOOKS & MANUALS

Epidemiologie et Facteurs de Risque des Cancers

2026 · Mohamed Aimene Melzi; Rdjaa Benkali; Hassina Idir; Adda Bounedjar