

BIOGRAPHICAL SKETCH

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NAME: Sebastiano Buti

eRA COMMONS USER NAME (credential, e.g., agency login): not available

POSITION TITLE: Assistant Professor of Oncology

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Music Conservatory "Arrigo Boito", Parma, Italy	diploma	06/1990	Ear training and music theory
Scientific high school "Guglielmo Marconi", Parma, Italy	diploma	06/1996	Scientific area
University of Parma, Parma, Italy	M.D.	06/2003	Medicine and Surgery
University of Parma, Parma, Italy	Consultant	11/2007	Medical Oncology
University of Parma, Parma, Italy	Ph.D.	04/2016	Renal pathophysiology and osteometabolic diseases
University of Bologna, Bologna, Italy	Advanced course	05/2021	Medical Statistics

A. Personal Statement

I am a Clinical Oncologist an Assistant Professor of Oncology, and my research is focused on prognostic and predictive factors for kidney cancer and lung cancer, drug-drug interactions, immunotherapy, rare tumors. I have a broad background in oncology, with specific training and expertise in translational and clinical research. As Principal Investigator (PI), co-PI or co-Investigator on several grants (University, Italian Ministry of University and Research, Italian Ministry of Health, Italian Association for Cancer Research (AIRC) an Industry-funded grants). I laid the groundwork for the proposed research by demonstrating the prognostic role of baseline lipid profiles in patients with advanced solid tumors treated with immunotherapy. Additionally, along with colleagues, I demonstrated the relationship between serum levels of certain pro-inflammatory and tumor-promoting cytokines and specific lipid parameters, suggesting a central role for cholesterol metabolism and transport in the tumor immune context. Furthermore, I successfully managed the projects described above (e.g., staffing, research protections, budget), collaborated with other researchers, and produced several peer-reviewed publications from each project. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget. The current application builds logically on my prior work. In summary, I have the expertise, leadership, training, expertise, and motivation necessary to successfully carry out the proposed research project.

Ongoing and recently completed projects that I would like to highlight include:

- Co-PI (P.I. Prof. Marcello Tiseo) role in the research project titled "*A multiomics approach to identify prognostic and predictive features of immunotherapy in solid tumors*", awarded funding of €400,000 under the "2020 Call - Emilia-Romagna Finalized Research Program (FIN-RER) / Region-University Research Projects".

- Co-PI (P.I. Prof. Marcello Tiseo) role in the Theory-enhancing research project titled “*A Multiomic Approach to Identify Prognostic and Predictive Signatures in Advanced Non-Oncogene Addicted Non-Small Cell Lung Cancer (NSCLC) receiving Immunotherapy*”, awarded funding of €450,000 under the “2021 Finalized Research Call (2020-2021 funds) with institutional recipient in the Emilia-Romagna region”.
- PI role in the project titled “*CHOLEsterol MEtabolism and Tumor immune microenvironment as biomarkers of benefit from immunotherapy in patients with metastatic renal cell carcinoma: CHOMET study*”, awarded funding of €12,000 under the “2022 University Research Call - Action B,” promoted by the University of Parma.
- PI role in the project titled “*LINKing CHOLEsterol hoMeostasis with immune-inflammatory profiles to predict immunotherapy efficacy in patients with metastatic renal cell carcinoma and non-small cell lung cancer: the LINCHOLM study*”, awarded funding of €194,817 under the 2022 PRIN Call (Projects of National Relevance), promoted by the Ministry of University and Research (MUR).
- Co-PI (P.I. Prof. Marcello Tiseo) role in the research project titled “*Radio-immune-genomic profiling to implement the current diagnostic performance and identify prognostic signatures in small cell lung cancer (SCLC)*”, awarded funding of €1,000,000 under the 2023 PNRR Call (National Recovery and Resilience Plan) for the category “High-impact chronic non-communicable diseases on healthcare and social systems”.

Citations:

1. Perrone F, Favari E, Maglietta G, Verzè M, Pluchino M, Minari R, Sabato R, Mazzaschi G, Ronca A, Rossi A, Cortellini A, Pecci F, Cantini L, Bersanelli M, Quaini F, Tiseo M, **Buti S**. [The role of blood cholesterol quality in patients with advanced cancer receiving immune checkpoint inhibitors](#). *Cancer Immunol Immunother*. 2023 Jul;72(7):2127-2135. doi: 10.1007/s00262-023-03398-3. Epub 2023 Feb 24. PMID: 36828963
2. Perrone F, Minari R, Bersanelli M, Bordi P, Tiseo M, Favari E, Sabato R, **Buti S**. [The Prognostic Role of High Blood Cholesterol in Advanced Cancer Patients Treated With Immune Checkpoint Inhibitors](#). *J Immunother*. 2020 Jul/Aug;43(6):196-203. doi: 10.1097/CJI.0000000000000321. PMID: 32404654
3. Mazzaschi G, Perrone F, Maglietta G, Favari E, Verzè M, Pluchino M, Minari R, Pecci F, Gnetti L, Campanini N, Silini EM, De Filippo M, Maffezzoli M, Giudice GC, Testi I, Tiseo M, Quaini F, **Buti S**. [Intersecting Blood Cytokines With Cholesterol Parameters to Profile Patients With Advanced Solid Tumors Receiving Immune Checkpoint Inhibitors](#). *J Immunother*. 2024 Jul 11. doi: 10.1097/CJI.0000000000000534. Online ahead of print. PMID: 38989743
4. Pecci F, Cantini L, Cognigni V, Perrone F, Mazzaschi G, Agostinelli V, Mentrasti G, Favari E, Maffezzoli M, Cortellini A, Rossi F, Chiariotti R, Venanzi FM, Lo Russo G, Galli G, Proto C, Ganzinelli M, Tronconi F, Morgese F, Campolucci C, Moretti M, Vignini A, Tiseo M, Minari R, Rocchi MLB, **Buti S** (co-last), Berardi R. [Prognostic Impact of Blood Lipid Profile in Patients With Advanced Solid Tumors Treated With Immune Checkpoint Inhibitors: A Multicenter Cohort Study](#). *Oncologist*. 2024 Mar 4;29(3):e372-e381. doi: 10.1093/oncolo/oyad273.

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

Jul 2024/present	Guest editor activities for the Special Collection titled ‘Renal Cell Carcinoma—From Genetics to Oncological and Surgical Treatments: New Insights’ in the journal <i>Technology in Cancer Research & Treatment</i>
Dec 2023/Dec 2034	Obtained the National Scientific Qualification (ASN) for Full Professor in the academic field 06/D3 ‘Blood Diseases, Oncology, and Rheumatology’
Sept 2023/Oct 2023	Research project reviewer activities for the Region of Sardinia, Italy
May 2022/present	Member of the teaching staff of the doctorate “Translational Medical and Surgical Sciences”, Department of Medicine and Surgery, University of Parma, Italy
Dec 2021/present	Assistant Professor (researcher type B) of Medical Oncology (SSD 06/D3), University of Parma, Italy

Nov 2020/Jun 2022	Qualification of Matter Expert for the Department of Medicine and Surgery, University of Parma, Italy
Jan 2020/Jun 2022	Contract Professor for the School of Specialization in Oncology, University of Parma, Italy
Jan 2020/present	Clinician Extender of AIOM guidelines for Kidney Cancer, Italian Medical Oncology Association (AIOM), Milan, Italy
Jan 2020/present	member of the Italian Medical Oncology Association (AIOM)
Oct 2018/Oct 2029	Obtained the National Scientific Qualification (ASN) for Associate Professor in the academic field 06/D3 'Blood Diseases, Oncology, and Rheumatology'
Jan 2018/present	Member of the Italian Network for Research in Urologic Oncology (MeeT-Uro) and Coordinator of the 'Rare Tumors' group
Jan 2016/present	Medical Oncologist - member of Phase I Unit, University Hospital of Parma, Italy
Jan 2012/present	Medical Oncologist at the Medical Oncology Unit, University Hospital of Parma, Italy
Jan 2012/present	Referring Oncologist for consultancy in the DMT for Kidney Transplant, University Hospital of Parma, Italy
Jan 2020/Dec 2021	Research project reviewer activities on behalf of the Austrian Science Fund (FWF) Austrian Science Fund (FWF), Vienna, Austria
Feb 2010/Dec 2011	Attending Physician at the Division of Medicine and Medical Oncology, Hospital Trust "Istituti Ospitalieri" of Cremona, Italy
Dec 2007/Feb 2010	Fixed-term employment contract in the Division of Medicine and Medical Oncology, Hospital Trust "Istituti Ospitalieri" of Cremona, Italy
May 2007/present	Peer review activities for numerous scientific journals (including Lancet and The Lancet Oncology)
Jun 2006/present	Member of the Italian Oncology Clinical Research Group (GOIRC).
May 2004/ Nov 2007	Medical Oncology fellowship, University of Parma, Italy
Sep 2003/Sep 2005	replacement of general practitioners in the Province of Parma (Local Health Authority - AUSL), Italy
Feb 2004/Apr 2004	Attending Physician at the Medical Oncology Unit of the University Hospital of Parma, Italy
Jun 2003/Feb 2004	Attending Physician at the Department of Internal Medicine, Nephrology and Prevention Sciences of the University Hospital of Parma, Italy
Jan 2000/Jan 2004	Monitor for two randomized multicenter trials involving patients with renal cell cancer treated with low doses of immunotherapy (citokines), GOIRC (Italian Oncology Group for Clinical Research), Parma, Italy
Nov 2000/Nov 2002	Students' tutorship, University of Parma, Italy

Honors

- 2023 Winner of the AIOM-Merck 2023 award, promoted by the Italian Association of Medical Oncology (AIOM) and aimed at the best projects focused on clinical and assistive solutions for the multidisciplinary management of patients with Urothelial Tumors. The award, supported by an unrestricted grant from Merck, was won with the project "Avelumab maintenance plus radiotherapy for metastatic urothelial carcinoma: a randomized multicentric phase II study" and was presented during the "XXV National AIOM Congress" held in Rome from November 10 to 12, 2023.
- 2020 Winner of the AccMed Digital Awards – Participants (3rd place), awarded during the "The Unusual Grandangolo in Oncology – Virtual Edition 2020" conference.
- 2014 Winner of the "Federico Calabresi" scholarship as a clinical oncologist under 45 years of age for one of the best publications of 2014 in high-impact international journals: "BOLERO-3 results: pharmacological activity or pharmacokinetic effect?" [The Lancet Oncology, Jul;15(8):e304 (2014)], awarded during the "Grandangolo 2014: A Year in Oncology – XVI Edition" conference held in Genoa on December 1-2, 2014.
- 2011 Winner of the "Federico Calabresi" scholarship as a clinical oncologist under 45 years of age for one of the best publications of 2011 in high-impact international journals: "Impressive response with imatinib in a heavily pretreated patient with metastatic c-kit mutated thymic carcinoma" [Journal of Clinical Oncology, Nov 20;29(33):e803-805 (2011)], awarded during the "Grandangolo 2011: A Year in Oncology – XIII Edition" conference held in Genoa on December 15-16, 2011.
- 2010 Winner of the award for the best abstract at the course "Renal Cancer – New Challenges in the Era of Biological Therapies" (November 26-27, 2010, Serralunga d'Alba [CN], Italy) with an oral presentation of

the work “Sunitinib with modified schedule in the treatment of metastatic renal cell carcinoma in the first line.”

- 2009 Winner of the “Pieter De Mulder” award given by the IRCCS Policlinico San Matteo Foundation in conjunction with the “Second Pavia International Symposium on Advanced Kidney Cancer” (June 26-27, 2009, Pavia, Italy), as the first author under 40 years of age, for the work “Combination of Bevacizumab plus low-doses Immunotherapy plus Chemotherapy (BIC regimen) in metastatic renal cell cancer: antitumor effects and variations of T-regulatory cells (Treg) during the treatment. A multicenter study of the Italian Oncology Group for Clinical Research (GOIRC).”
- 2008 Winner of the 2008 ASCO (American Society of Clinical Oncology) Foundation Merit Award received at the 2008 ASCO Genitourinary Symposium (February 14-16, 2008, San Francisco, CA, USA) for the exemplary work on the abstract “Dose-finding/phase II trial with a combination of Bevacizumab (B) plus Immunotherapy plus Chemotherapy (BIC) in patients with metastatic renal cell cancer (mRCC). A GOIRC multicenter study.”

C. Contributions to Science

The research I have been involved in has been primarily conducted in the field of oncology, focusing on the treatment of tumors of the genitourinary tract, lung cancer, and some rare tumors. By collaborating with various research groups, both Italian and international, I believe I have contributed in the following areas:

- Better definition of certain prognostic factors in advanced kidney and lung cancer.
- Development and external validation of integrated prognostic models (currently referenced by several important guidelines, such as the European Urology Guidelines EAU).
- Role of certain blood count parameters in patients treated with antiangiogenics and/or immunotherapy for metastatic kidney cancer.
- Treatment of some rare neoplasms, especially within the field of genitourinary tract disorders.
- Adjuvant treatment of kidney neoplasms.
- Role of certain lipid profile parameters in patients with advanced solid tumors treated with immunotherapy.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/1LK3dbZ1NCa5-/bibliography/public/>