

SARA BLEVE

IRST IRCCS – Romagna Cancer Institute “Dino Amadori” (Meldola, Italy)

PERSONAL STATEMENT

I started my Residency in Medical Oncology at the University of Ferrara, but I spent most of my clinical activity at Istituto Romagnolo per lo Studio dei Tumori “Dino Amadori” - IRST IRCCS in Meldola, where I strived to actively pursue research and scientific publications. During my Residency, I was involved in several translational research projects and served as sub-investigator in multiple clinical trials in Genitourinary cancers, gaining extensive experience in experimental protocols and clinical research methodology. During the last year of my residency, I joined the Department of Oncologic Pathology at Weill Cornell University in New York, where I was involved in several liquid biopsy research projects across different clinical settings, with a particular focus on advanced prostate cancer. I also contributed to the design of clinical trials targeting metabolic pathways in prostate cancer. I worked in Professor Massimo Loda’s lab at Weill Cornell Medicine, focusing on lipidomics in prostate cancer as a potential novel biomarker, integrating molecular pathology with translational oncology approaches. After completing my experience in the United States, I returned to IRST in Meldola, where I am currently working as a clinical oncologist. In this role, I am committed to translating the knowledge and methodological expertise acquired abroad into daily clinical practice and research activity, with the goal of strengthening translational research programs in Genitourinary cancers and fostering international collaborations. As a young oncologist and researcher, my aim is to actively initiate, develop, and lead innovative clinical and translational projects in the field of Genitourinary oncology, bridging laboratory discoveries with patient-centered care.

WORK EXPERIENCE

2023-Today	Clinical Assistant Physician – Clinical and Experimental Oncology Unit Istituto Romagnolo per lo Studio dei Tumori "Dino Amadori" - IRST IRCC, Meldola (FC) Italy <i>Clinical activity in Genitourinary Cancer Unit</i> <i>Clinical activity in High dose chemotherapy and Transplantation for Germ cell Tumors Unit</i> <i>Member of the multidisciplinary Genitourinary Cancer Board</i> <i>Member of the multidisciplinary Gynecologic Cancer Board</i>
Jan 2025-Jan 2026	Postdoctoral Associate Department of Pathology and Laboratory Medicine, Weill Cornell University (WCM), New York (NY)
2018-2023	Medical Oncology Resident internship – Istituto Romagnolo per lo Studio dei Tumori "Dino Amadori" - IRST IRCC, Meldola (FC) Italy
2017-December	Post-graduate internship in Emergency Department – “Infermi” Hospital Rimini (RN), Italy
2018-January	Post-graduate internship in General Surgery Department – “Infermi” Hospital Rimini (RN), Italy

EDUCATION

- 2018-2023 **Resident Degree: Medical Oncology**
50/50 L University of Ferrara (FE) Italy
- Thesis: *Role of lipidomics in the identification of potential circulating biomarkers in prostate cancer*
- 2022-2023 **Visiting Fellowship,**
Department of Pathology and Laboratory Medicine, Weill Cornell University (WCM), New York (NY).
- 2011-2017 **Master's Degree: Medicine and Surgery**
110/110 L University of Bologna (BO) Italy “*Alma mater Studiorum*”
- Thesis: *Correlation between promoter methylation MGMT and response to temozolomide-based therapy in neuroendocrine tumors. Observational, retrospective, multicenter study.*

PARTICIPATION TO WORKSHOP AND CONFERENCE

- May-2025 **PPCG, PAN PROSTATE CANCER GROUP MEETING,** Bologna (IT)
- June-2024 **ASCO, American Society of Clinical Oncology Annual Meeting-** Chicago (IL)
- Jan-2024 **ASCO Genitourinary Cancers Symposium** - San Francisco (CA)
Poster Presenter: *Lipidomic profiling as a biomarker for prostate cancer diagnosis and response to enzalutamide*
- Dec-2023 **Theranostics in metastatic castration-resistant prostate cancer, MEET-URO Workshop-** Maranello (IT)
Discussant: *Creation and presentation of a diagnostic-therapeutic path of theranostics in CRPC*
- Nov-2023 **Uro-Oncology Case Contest-** Cesena (IT)
Presenter: *clinical management of patients with CRPC and bone metastases*
- July-2023 **ASCO/AACR Methods in Clinical Cancer Research Workshop** - San Diego (CA)
Clinical trial development: *Multi-institutional Randomized Pilot Trial of Enzalutamide with or without the FASN inhibitor TVB-2640 in men with progressive metastatic Castration-Resistant Prostate Cancer (mCRPC)*
- July-2021 **28° Master in Immuno-oncology-virtual meeting**
Case report Presenter: *Immunotoxicity in renal cancer disease*

CERTIFICATES

Dec-2023	Basic Life Support Defibrillation (BLSD) training
Oct-2023	ISLB Certificate of Advanced Studies (CAS): Liquid Biopsy Module 1: Precision Oncology
Mar-2018	State exam giving full qualification as a medical doctor

FUNDING

Jan 2025-Jan 2026:

International Post-doc Research Fellowship, AICF (American Italian Cancer Foundation), for the project “Lipid metabolic reprogramming predicts response to AR selective inhibitor (ARSI) in metastatic, castration-resistant prostate cancer (mCRPC) patients”).

PROFESSIONAL MEMBERSHIP

2018 - Member, *Associazione Italiana di Oncologia Medica (AIOM)* 2021 - Member, *Italian Germ Cell Cancer Group (IGCCG)*
2022 - Member, *Italian Network for Research In Urologic-Oncology (MEET-URO)* 2022 - Member, *Multicenter Italian Trials in Ovarian Cancer (MITO)*
2023 - Member, *American Association for Cancer Research (AACR)* 2023 - Member, *International Society of Liquid Biopsy (ISLB)*
2023 - Member, *American Society of Clinical Oncology (ASCO)*
2025 – Member, *European Society of Medical Oncology (ESMO)*

PUBLICATIONS

- Francini E, **Bleve S**, Fanelli GN, Serafini MS, Pederzoli F, Ferri A, Minonne E, Venturini J, Rodrigues S, Pakula H, Lolli C, Cristofanilli M, Nuzzo PV. *Circulating cell-free methylated DNA immunoprecipitation sequencing (cfMeDIP-seq) in oncology: from technological advances to clinical applications*. NPJ Precis Oncol. 2026 May 25. doi: 10.1038/s41698-026-01507-w. Epub ahead of print. PMID: 42185453.
- Pederzoli F, Pakula H, Rodrigues S, Garner R, Nuzzo PV, **Bleve S**, Rickman DS, Fanelli GN, Loda M. Mapping prostate cancer pathobiology: *A review of genetically engineered mouse models (GEMMs)*. *Gene*. 2026 Jun 20;996:150131. doi: 10.1016/j.gene.2026.150131. Epub 2026 Mar 27. PMID: 41905611; PMCID: PMC13070296.
- **Bleve S**, Ravera F, Rodrigues S, Pederzoli F, Pakula H, Brighi N,

Giunta EF, Schepisi G, Virga A, Gurioli G, Burgio SL, Fanelli GN, Butler LM, Nanus DM, Swinnen JV, Nuzzo PV, Lolli C, De Giorgi U, Loda M. Lipidomic profiling in metastatic prostate cancer captures tumor metabolic rewiring and its modulation by androgen receptor-targeting therapy. Prostate Cancer Prostatic Dis. 2026 Mar 13;10.1038/s41391-026-01100-z. doi: 10.1038/s41391-026-01100-z. Epub ahead of print. PMID: 41820670; PMCID: PMC13139911.

- Urbini M, Eleveld TF, Polano M, Scarpi E, Menna C, Gianni C, Janssen FW, Schepisi G, Gurioli G, Kucerova L, Gillis AJM, Virga A, **Bleve S**, Rosti G, Ulivi P, Mego M, Looijenga LHJ, De Giorgi U. Impact of Circulating Tumor DNA and Copy-Number Alterations on Clinical Outcome in Relapsed/Refractory Germ Cell Tumors Treated With Salvage High-Dose Chemotherapy. J Clin Oncol. 2026 Mar 20;44(9):801-811. doi: 10.1200/JCO-25-02159. Epub 2026 Feb 19. PMID: 41712877; PMCID: PMC13001904.
- Giunta EF, Schepisi G, **Bleve S**, Serra R, Brighi N, Torresan I, Tassinari E, Zanuccoli S, Lolli C. Neuroendocrine prostate cancer (NEPC) in focus: state of the art and future perspectives. Discov Oncol. 2026 Feb 14;17(1):457. doi: 10.1007/s12672-026-04482-7. PMID: 41689691; PMCID: PMC13009425.
- Brighi N, Wetterskog D, Vainauskas O, Orlando F, Ciani Y, Gurioli G, Conteduca V, Casadei C, Lolli C, Giunta EF, **Bleve S**, Basso U, Pierantoni F, Fornarini G, Mosca A, Nicodemo M, Banna GL, Ulivi P, Wingate A, Cremaschi P, de Giorgi U, Demichelis F, Attard G. Liquid Biopsy Identifies Taxane Resistance and Clonal Selection in Castration-Resistant Prostate Cancer. Clin Cancer Res. 2025 Dec 1;31(23):4985-4995. doi: 10.1158/1078-0432.CCR-25-2121. PMID: 41081632.
- **Bleve S**, Nuzzo PV, Arham AB, Holmes A, Tagawa ST. Androgen receptor pathway signaling inhibitors in development for prostate cancer therapy. Expert Opin Investig Drugs. 2025 Oct;34(10):755-773. doi: 10.1080/13543784.2025.2573647. Epub 2025 Oct 15. PMID: 41065592.
- Casadei C, Scarpi E, Conteduca V, Gurioli G, Cursano MC, Brighi N, Lolli C, Schepisi G, Basso U, Fornarini G, **Bleve S**, Farolfi A, Altavilla A, Burgio SL, Giunta EF, Gianni C, Filograna A, Ulivi P, Olmos D, Castro E, De Giorgi U. Inherited Mutations in DNA Damage Repair Genes in Italian Men with Metastatic Prostate Cancer: Results from the Meet-URO 10 Study. Eur Urol Open Sci. 2024 Mar;61:44-51. doi: 10.1016/j.euros.2024.01.015.
- Conteduca V, Scarpi E, Rossi A, Ferroni F, Gurioli G, **Bleve S**, Gianni C, Schepisi G, Brighi N, Lolli C, Cursano MC, Virga A, Casadei C, Altavilla A, Farolfi A, Ulivi P, Barone D, Matteucci F, De Giorgi U. Changing metastatic patterns associate with

dynamics of circulating tumor DNA in metastatic castration-resistant prostate cancer. *Oncologist*. 2025 May 8;30(5):oyaf107. doi: 10.1093/oncolo/oyaf107.

- Nuzzo PV, Rodrigues S, Ribeiro CF, Teixeira IF, Fanelli GN, **Bleve S**, Ravera F, Pakula H, Pederzoli F, Nanus DM, Loda M. Targeting cancer metabolism: Therapeutic potential of the fatty acid synthase (FASN) inhibitors. Crit Rev Oncol Hematol. 2025 Aug 20;214:104910. doi: 10.1016/j.critrevonc.2025.104910.
- Schiavone ML, Scarpitta R, Ravera F, **Bleve S**, Reduzzi C, Di Cocco F, Dameri M, Zoppoli G, Naccarato AG, Nuzzo PV, Cristofanilli M, Fanelli GN, Scatena C. Liquid biopsy in breast cancer: Redefining precision medicine. J Liq Biopsy. 2025 Jul 16;9:100312. doi: 10.1016/j.jlb.2025.100312.
- Serra R, Giunta EF, Schepisi G, Brighi N, Montanari D, Lolli C, **Bleve S**, Piras M, Palmieri G, Scartozzi M, Paliogiannis P, De Giorgi U. An evaluation of talazoparib plus enzalutamide for the treatment of metastatic castration-resistant prostate cancer. Expert Rev Anticancer Ther. 2024 Dec;24(12):1221-1227. doi: 10.1080/14737140.2024.2445152. Epub 2024 Dec 25. PMID: 39716888.
- Giunta EF, Caroli P, Scarpi E, Altavilla A, Rossetti V, Marini I, Celli M, Casadei C, Lolli C, Schepisi G, **Bleve S**, Brighi N, Cursano MC, Paganelli G, Matteucci F, De Giorgi U. Correlation of [68Ga]Ga-PSMA PET/CT response and PSA decline in first-line enzalutamide for metastatic castration-resistant prostate cancer patients. Eur J Nucl Med Mol Imaging. 2024 Dec;52(1):326-334. doi: 10.1007/s00259-024-06887-4. Epub 2024 Aug 29. PMID: 39207484; PMCID: PMC11599341.
- Urbini M, **Bleve S**, Schepisi G, Menna C, Gurioli G, Gianni C, De Giorgi U. Biomarkers for Salvage Therapy in Testicular Germ Cell Tumors. Int J Mol Sci. 2023 Nov 28;24(23). doi: 10.3390/ijms242316872.
- Omar M, Nuzzo PV, Ravera F, **Bleve S**, Fanelli GN, Zanettini C, Valencia I, Marchionni L. Notch-based gene signature for predicting the response to neoadjuvant chemotherapy in triple-negative breast cancer. J Transl Med. 2023 Nov 15;21(1):811. doi: 10.1186/s12967-023-04713-3.
- Cursano MC, Giunta EF, Scarpi E, Casadei C, Virga A, Ulivi P, **Bleve S**, Brighi N, Ravaglia G, Pantano F, Conteduca V, Santini

D, De Giorgi U. Impact of Somatic DNA Repair Mutations on the Clinical Outcomes of Bone Metastases from Castration- Resistant Prostate Cancer. Int J Mol Sci. 2023 Aug 4;24(15). doi: 10.3390/ijms241512436.

- Schepisi G, Gianni C, Palleschi M, **Bleve S**, Casadei C, Lolli C, Ridolfi L, Martinelli G, De Giorgi U. The New Frontier of Immunotherapy: Chimeric Antigen Receptor T (CAR- T) Cell and Macrophage (CAR-M) Therapy against Breast Cancer. Cancers (Basel). 2023 Mar 4;15(5). doi: 10.3390/cancers15051597.
- Gianni C, Palleschi M, Merloni F, **Bleve S**, Casadei C, Sirico M, Di Menna G, Sarti S, Cecconetto L, Mariotti M, De Giorgi U. Potential Impact of Preoperative Circulating Biomarkers on Individual Escalating/de-Escalating Strategies in Early Breast Cancer. Cancers (Basel). 2022 Dec 23;15(1). doi: 10.3390/cancers15010096. .
- Gianni C, Palleschi M, Schepisi G, Casadei C, **Bleve S**, Merloni F, Sirico M, Sarti S, Cecconetto L, Di Menna G, Schettini F, De Giorgi U. Circulating inflammatory cells in patients with metastatic breast cancer: Implications for treatment. Front Oncol. 2022;12:882896. doi: 10.3389/fonc.2022.882896.
- **Bleve S**, Cursano MC, Casadei C, Schepisi G, Menna C, Urbini M, Gianni C, De Padova S, Filograna A, Gallà V, Rosti G, Barone D, Chovanec M, Mego M, De Giorgi U. Inflammatory Biomarkers for Outcome Prediction in Patients With Metastatic Testicular Cancer. Front Oncol. 2022;12:910087. doi: 10.3389/fonc.2022.910087.
- Conteduca V, Scarpi E, Wetterskog D, Brighi N, Ferroni F, Rossi A, Romanel A, Gurioli G, **Bleve S**, Gianni C, Schepisi G, Lolli C, Cortesi P, Matteucci F, Barone D, Paganelli G, Demichelis F, Beltran H, Attard G, De Giorgi U. Plasma tumor DNA is associated with increased risk of venous thromboembolism in metastatic castration-resistant cancer patients. Int J Cancer. 2022 Apr 1;150(7):1166-1173. doi: 10.1002/ijc.33834.
- Mollica V, Santoni M, Matrana MR, Basso U, De Giorgi U, Rizzo A, Maruzzo M, Marchetti A, Rosellini M, **Bleve S**, Maslov D, Tawagi K, Philon E, Blake Z, Massari F. Concomitant Proton Pump Inhibitors and Outcome of Patients Treated with Nivolumab Alone or Plus Ipilimumab for Advanced Renal Cell Carcinoma. Target Oncol. 2022 Jan;17(1):61-68. doi: 10.1007/s11523-021-00861-y.

- Urbini M, Schepisi G, **Bleve S**, Virga A, Gianni C, Gurioli G, Ulivi P, De Giorgi U. Primary Mediastinal and Testicular Germ Cell Tumors in Adolescents and Adults: A Comparison of Genomic Alterations and Clinical Implications. Cancers (Basel). 2021 Oct 18;13(20). doi: 10.3390/cancers13205223.
- Conteduca V, Scarpi E, Farolfi A, Brighi N, Rossi L, Gurioli G, Lolli C, Schepisi G, **Bleve S**, Gianni C, Virga A, Altavilla A, Burgio SL, Menna C, De Giorgi U. Melphalan as a Promising Treatment for BRCA-Related Ovarian Carcinoma. Front Oncol. 2021;11:716467. doi: 10.3389/fonc.2021.716467.
- Conteduca V, Brighi N, Conteduca D, **Bleve S**, Gianni C, Schepisi G, Iaia ML, Gurioli G, Lolli C, De Giorgi U. An update on our ability to monitor castration-resistant prostate cancer dynamics with cell-free DNA. Expert Rev Mol Diagn. 2021 Jul;21(7):631-640. doi: 10.1080/14737159.2021.1935881.
- Schepisi G, Gianni C, **Bleve S**, De Padova S, Menna C, Lolli C, Filograna A, Conteduca V, Urbini M, Gallà V, Casadei C, Rosti G, De Giorgi U. Vitamin D Deficiency in Testicular Cancer Survivors: A Systematic Review. Int J Mol Sci. 2021 May 13;22(10). doi: 10.3390/ijms22105145.

LANGUAGES

English: Cambridge First in English (FCE)-Grade: B Speaking: B2, Writing: B2

French: Delf Certificate in French- Grade: B Speaking: B2, Writing: B2