


PERSONAL INFORMATION

ARSELA PRELAJ

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Sex Female | Date of birth 20/02/1987 | Nationality Albanian - Italian



JOB APPLIED FOR

Medical Oncologist

WORK EXPERIENCE

21/09/2018–Present

Medical Oncologist at the Thoracic Oncology Unit , Medical Oncology Department 1 (Directed by Prof. de Braud) and PhD Student in Bioengineering and Artificial Intelligence at Politecnico di Milano
Fondazione IRCCS Istituto Nazionale Tumori Via Giacomo Venezian, 1, CAP 20133, Milan (Italy)

01/12/2017–08/08/2018

Resident Doctor, Thoracic Oncology Division, IRCCS "Giovanni Paolo II" Bari, Directed by Dr. Domenico Galetta
Bari (Italy)

01/04/2017–03/10/2017

Resident doctor, Thoracic Oncology Division, European Institute of Oncology (IEO), Milan, directed by Prof. Filippo De Marinis
Milan (Italy)

09/10/2017–17/11/2017

Esmo Clinical Unit Visit award, Resident Doctor at Lung Unit Team, at the Christie NHC Foundation Trust, under supervision of Dr. Raffaele Califano
Manchester (United Kingdom)

08/08/2013–31/03/2017

Resident doctor in training in Medical Oncology
Faculty of "Medicina e Farmacia" "Policlinico Umberto I " Sapienza University of Rome, directed by Prof. Silverio Tomao (Italy)

03/08/2018–20/08/2018

Medical doctor

ANFFAS Roma Onlus Rehabilitation center for people with disabilities credited to the national health system. Via Aurelia Antica 269, 00165 Rome (Italy), Pesaro (Italy)

Care and treatment of people with disabilities: entertainment, organization of social activities, accompanying the patients as a partner- health worker.

EDUCATION AND TRAINING

05/08/2019–Present

PhD student in Bioengineering at Politecnico di Milano;

With scholarship. PhD topic: BEDSIDE, BENCH AND ARTIFICIAL INTELLIGENCE TO PREDICT PATIENT'S RESPONSE IN NON-SMALL CELL LUNG CANCER TREATED WITH IMMUNOTHERAPY, Milan (Italy)

- 05/09/2018–Present Postgraduate Specialization in Medical Oncology (70/70) with Honors.
Sapienza University of Rome, Policlinico Umberto I, Rome (Italy)

- 08/08/2013–08/08/2018 Medical Oncologist in training
Sapienza University of Rome, Rome (Italy)

- 11/04/2018–08/05/2019 Certificate of Advance Studies in Lung Cancer (CAS Lu) program, European School of Oncology and University of Zurich
University of Zurich, Tutor Rolf A. Stahel, Zurich (Swaziland)
Certificate of Lung Cancer lasting 1 year (Vote 5.4/6)

- 20/09/2012–Present Master's Degree in Medicine and Surgery (110/110) with honors, at the Sapienza University of Rome. Dissertation title: "Genetic polymorphisms in lung cancer"
Sapienza University, Policlinico Umberto I, Rome (Italy)

- 14/03/2013–Present Medical Doctor fully licensed for Italy N. 60318
Ordine Provinciale di Roma dei Medici-Chirurghi e degli Odontoiatri, Rome (Italy)

- 01/12/2008–10/09/2012 Elective Student
Faculty Of Medicine and Psychology , Sapienza University of Rome, Rome (Italy)

from december 2008 to september 2012: elective student at "UOC Medical Oncology" Director Prof. P. Marchetti (S. Andrea Hospital Rome)

- 01/08/2008–31/08/2012 Volunteer
ANFFAS Roma Onlus Rehabilitation center for people with disabilities credited to the national health system Via Aurelia Antica 269, 00165 Rome (Italy)
Care and treatment of people with disabilities: entertainment, organization of social activities, accompanying the patients as a partner- health worker.

PERSONAL SKILLS

Mother tongue(s) Albanian

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Italian Sign Language	C2	C2	C2	C2	C2
Celis					
English	C2	C2	C2	C2	C2
French	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages - Self-assessment grid

Communication skills

Excellent interpersonal skills with colleagues, even in multicultural environments; adaptation, teamwork

Organizational / managerial skills

Excellent organizational and team management skills, I coordinated two Horizon calls, Horizon 2020 then Horizon Europe, each with a the direct monitoring and management of large consortia from EU and non-EU countries, involving 15 partners from 10 different countries (EU, US and Israel).

Job-related skills

I focused my education beyond oncology clinical care activities, to include learning about laboratory techniques and translational work. I dedicated my work to the clinical care of patients with (lung and SNC) cancer, thereby developing a thorough understanding of the global management of the disease.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

Computer use. Windows, Apple, Linux and Android, Office, OpenOffice, Adobe Reader, photo editing programs and graphics, browsing the Internet and email. Operating machinery and appliances for communication: Ipod, Iphone, digital cameras, fax machines.

Excellent Knowledge of SPSS program, MatLab, Python, MedStat and extended uses for statistics analyses (descriptive, univariate, multivariate and survival analyse). Machine and Deep Learning Techniques.

Driving Licence

B

ADDITIONAL INFORMATION

H-index 15, Scopus, 17 (Google Scholar)

Citations More than 923

Reviewer Since September 2016, reviewer of more than 20 Cancer Journals,

Publications

- Prelaj A**, Tay R, Ferrara R, Chaput-gras N, Besse B and Califano R. Predictive biomarkers of response for immune checkpoint inhibitors in NSCLC. *Eur J Cancer*. 2019 Jan;106:144-159
- Tay R, **Prelaj A** and Califano R. "Immune checkpoint blockade for advanced non-small cell lung cancer: challenging clinical scenarios" *J Thorac Dis*. 2018 May;10(Suppl 13):S1494-S1502.
- Prelaj A**, Rebuzzi SE, Del Bene G, Giròn Berrios JR, Emiliani A, De Filippis L, Prete AA, Pecorari S, Manna G, Ferrara C, Rossini D, Longo F. Evaluation of the efficacy of cisplatin-etoposide and the role of thoracic radiotherapy and prophylactic cranial irradiation in LCNEC. *ERJ Open Res*. 2017 Mar 9;3(1). pii: 00128-2016.
- Prelaj A**, Lo Russo G, Proto C, Signorelli D, Ferrara R, Galli G, et al. DiM: Prognostic Score for Second- or Further-line Immunotherapy in Advanced Non-Small-Cell Lung Cancer: An External Validation. *Clin Lung Cancer*. 2020 Mar 7:S1525-7304(20)30005-X. doi: 10.1016/j.clc.2020.01.005. Online
- Prelaj A**, Rebuzzi SE, Pizzutilo P, Bilancia M, Montrone M, Pesola F, et al. EPSILoN: A Prognostic Score Using Clinical and Blood Biomarkers in Advanced Non-Small-cell Lung Cancer Treated With Immunotherapy. *Clin Lung Cancer*. 2020 Mar 7:S1525-7304(19)30334-1. doi: 10.1016/j.clc.2019.11.017.

6. **Prelaj A**, Ferrara R, Rebuzzi SE, Proto C, Signorelli D, Galli G, De Toma A, Randon G, et al. *EPSiLoN: A Prognostic Score for Immunotherapy in Advanced Non-Small-Cell Lung Cancer: A Validation Cohort.* *Cancers (Basel)*. 2019 Dec 5;11(12):1954. doi: 10.3390/cancers11121954.
7. Trama A, Proto C, Signorelli D, Garassino MC, Lo Russo G, Ganzinelli M, **Prelaj A** et al. *Treatment patterns among patients with malignant pleural mesothelioma: An Italian, population-based nationwide study.* *LUME study WG. Thorac Cancer*. 2020 May 4. doi: 10.1111/1759-7714.13456. Online ahead of print.
8. Babacan NA, Pina IB, Signorelli D, **Prelaj A**, Garassino MC, Tanvetyanon T. *Relationship Between Programmed Death Receptor-Ligand 1 Expression and Response to Checkpoint Inhibitor Immunotherapy in Pulmonary Sarcomatoid Carcinoma: A Pooled Analysis.* *Clin Lung Cancer*. 2020 Mar 9:S1525-7304(20)30073-5. doi: 10.1016/j.clcc.2020.02.022. Online ahead of print.
9. Galli G, De Toma A, Pagani F, Randon G, Trevisan B, **Prelaj A**, et al. *Efficacy and safety of immunotherapy in elderly patients with non-small cell lung cancer.* *Lung Cancer*. 2019 Nov;137:38-42. doi: 10.1016/j.lungcan.2019.08.030. Epub 2019 Sep 10. PMID: 31526910
10. Nichetti F, Ligorio F, Zattarin E, Signorelli D, **Prelaj A**, et al. *Is There an Interplay between Immune Checkpoint Inhibitors, Thromboprophylactic Treatments and Thromboembolic Events? Mechanisms and Impact in Non-Small Cell Lung Cancer Patients.* *Cancers (Basel)*. 2019 Dec 25;12(1):67. doi: 10.3390/cancers12010067. PMID: 31881699 Free PMC article.
11. Proto C, Ferrara R, Signorelli D, Lo Russo G, Galli G, Imbimbo M, **Prelaj A**, Zilembo N, Ganzinelli M, Pallavicini LM, De Simone I, Colombo MP, Sica A, Torri V, Garassino MC. *Choosing wisely first line immunotherapy in non-small cell lung cancer (NSCLC): what to add and what to leave out.* *Cancer Treat Rev*. 2019 Mar 28;75:39-51.
12. Rossi A, Tay R, Chiramel J, **Prelaj A**, Califano R. *Current and future therapeutic approaches for the treatment of small cell lung cancer.* *Expert Rev Anticancer Ther*. 2018 May;18(5):473-486.
13. Passaro A, **Prelaj A**, Pochesci A, Spitaleri G, Rossi G, Del Signore E, Catania C, de Marinis F. *Brigatinib for the treatment of ALK-positive advanced non-small cell lung cancer patients.* *Drugs Today (Barc)*. 2017 Aug;53(8):435-446.
14. Timperi E, Focaccetti C, Gallerano D, Panetta M, Spada S, Gallo E, Visca P, Venuta F, Diso D, **Prelaj A**, Longo F, Facciolo F, Nisticò P, Barnaba V. *IL-18 receptor marks functional CD8+ T cells in non-small cell lung cancer* *Oncoimmunology*. 2017 May 12;6(7):e1328337.
15. Passaro A, **Prelaj A**, Bonanno L, Tiseo M, Tuzi A, Garassino M, Chiari R, Rocco D, Grossi F, Sini C, Cortinovis D, Pilotto S, Camerini A, Toschi L, Spitaleri G, Cappuzzo F, de Marinis F. *Activity of EGFR TKIs in Caucasian Patients With NSCLC Harboring Potentially Sensitive Uncommon EGFR Mutations.* *Clin Lung Cancer*. 2019 Mar;20(2):e186-e194.
16. Proto C, Signorelli D, Mallone S, **Prelaj A**, Lo Russo G, Imbimbo M, Galli G, Ferrara R, Ganzinelli M, Leuzzi G, Greco FG, Calareso G, Botta L, Gatta G, Garassino M, Trama A. *The Prognostic Role of TNM Staging Compared With Tumor Volume and Number of Pleural Sites in Malignant Pleural Mesothelioma.* *Clin Lung Cancer*. 2019 Jun 26. pii: S1525-7304(19)30170-6.
17. Galli G, Proto C, Signorelli D, Imbimbo M, Ferrara R, **Prelaj A**, De Toma A, Ganzinelli M, Zilembo N, de Braud F, Garassino MC, Lo Russo G. *Characterization of patients with metastatic non-small-cell lung cancer obtaining long-term benefit from immunotherapy.* *Future Oncol*. 2019 Jul 24.
18. **Prelaj A**, Rebuzzi SE, Magliocca FM, Speranza I, Corongiu E, Borgoni G, Perugia G, Liberti M, Bianco V. *Neoadjuvant Chemotherapy in Neuroendocrine Bladder Cancer: A Case Report.* *Am J*

Case Rep. 2016 Apr 13;17:248-53.

19. **Prelaj A**, Rebuzzi SE, Caffarena G, Giròn Berrios JR, Pecorari S, Fusto C, Caporlingua A et al. Therapeutic approach in glioblastoma multiforme with primitive neuroectodermal tumor components: Case report and review of the literature. *Oncol Lett.* 2018 May;15(5):6641-6647.
20. **Prelaj A**, Rebuzzi SE, Salvati M, Pecorari S, Pozzi C, Fusto C, Ferrara C, Tomao S, Vincenzo B. Retrospective analysis to evaluate the efficacy and the safety of Bevacizumab in the treatment of recurrent malignant gliomas. *Transl Med Comm April 2018*; 3:6
21. **Prelaj A**, Rebuzzi SE, Salvati M, d'Elia A, Antonelli M, Ferrara C, Tomao S, Bianco V. Non-conventional fotemustine schedule as second-line treatment in recurrent malignant gliomas: survival across disease and treatment subgroup analysis and review of the literature. *Mol Clin Oncol.* 2019 Jan;10(1):58-66
22. **Prelaj A**, Rebuzzi SE, Grassi M, Giròn Berrios JR, Pecorari S, Ferrara C, Salvati M, Tomao S, Bianco V. Multimodal treatment for local recurrent malignant gliomas: resurgery and/or reirradiation followed by chemotherapy. *Mol Clin Oncol.* 2019 Jan;10(1):49-57.
23. **Prelaj A**, Rebuzzi SE, Pozzi C, Ferrara C, Frantellizzi V, Follacchio GA, De Vincentis G, Tomao S, Bianco V. Radium-223 in patients with metastatic castration-resistant prostate cancer: Efficacy and safety in clinical practice. *Oncol Lett.* 2019 Feb;17(2):1467-1476
24. De Vincentis G, Follacchio GA, Frantellizzi V, **Prelaj A**, Farcomeni A, Giuli A, Bianco V, Tomao S. 223Ra-dichloride therapy in an elderly bone metastatic castration-resistant prostate cancer patient: a case report presentation and comparison with existing literature. *Aging Clin Exp Res.* 2017 Aug 30.
25. Paris I, **Prelaj A**, Onesti CE, Baldoni A, Giovagnoli MR, Bassanelli M, Lauro S, Marchetti P. Esophageal stenosis: a differential diagnosis between esophageal cancer and metastasis from other neoplasia. *Anticancer Res.* 2014 Jan;34(1):363-6.
26. Nichetti F, Lo Russo G, **Prelaj A**, Provenzano L, de Braud F, Cabiddu M, Garassino MC, Petrelli F. ALK/ROS1 rearrangements: A real hallmark for thromboembolic events in cancer patients? *Thromb Res.* 2020 Oct;194:176-177. doi: 10.1016/j.thromres.2020.06.041. Epub 2020 Jun 24.
27. **Prelaj A**, Proto C, Lo Russo G, Signorelli D, Ferrara R, Mensah M, Galli G, De Toma A, Viscardi G, Brambilla M, Lobefaro R, Trevisan B, Trovò F, Torri V, Sozzi G, Garassino MC, Boeri M. Integrating clinical and biological prognostic biomarkers in patients with advanced NSCLC treated with immunotherapy: the DEMo score system. *Transl Lung Cancer Res.* 2020 Jun;9(3):617-628. doi: 10.21037/tlcr-20-231.
28. Comandini D, Grassi M, **Prelaj A**, Martelli V, Damiani A, Damiano G, Rebuzzi SE. Gastrointestinal stromal tumors and second primary malignancies: a retrospective monocentric analysis. *Neoplasma.* 2020 Nov;67(6):1416-1423. doi: 10.4149/neo_2020_200301N212. Epub 2020 Jul 13.
29. Manglaviti S, Brambilla M, Signorelli D...de Braud FGM, Garassino MC, **Prelaj A**. Immune-Checkpoint Inhibitors in Advanced Non-Small Cell Lung Cancer With Uncommon Histology. *Clin Lung Cancer.* 2021 Jul 5:S1525-7304(21)00180-7.
30. Ferrara R, Signorelli D, Proto C, **Prelaj A**, Garassino MC, Lo Russo G. Novel patterns of progression upon immunotherapy in other thoracic malignancies and uncommon populations. *Transl Lung Cancer Res.* 2021 Jun;10(6):2955-2969. doi: 10.21037/tlcr-20-636.
32. Perrone F, Belluomini L, Mazzotta M, Bianconi M, Di Noia V, Meacci F, Montrone M, Pignataro D, **Prelaj A**, et al. Exploring the role of respiratory microbiome in lung cancer: A systematic review. *Crit Rev Oncol Hematol.* 2021 Aug;164:103404.
33. Occhipinti M, Brambilla M, Galli G, Manglaviti S, Giammaruco M, **Prelaj et al.** Evaluation of Drug-Drug Interactions in EGFR-Mutated Non-Small-Cell Lung Cancer Patients during Treatment with Tyrosine-Kinase Inhibitors. *J Pers Med.* 2021 May 18;11(5):424. doi: 10.3390/jpm11050424.
34. Longo V, Catino A, Montrone M, Pizzutilo P, Pesola F, Marech I, Capone I, **Prelaj A**, Galetta D. Successful treatment of triple EGFR mutation T785A/L861Q/H297_E298 with afatinib. *Thorac Cancer.* 2021 Jul;12(13):2031-2034.
35. Shi J, Yang F, Zhou N, Jiang Y, Zhao Y, Zhu J, **Prelaj A** et al. Isochorismatase domain-containing protein 1 (ISOC1) participates in DNA damage repair and inflammation-related pathways to promote lung cancer development. *Transl Lung Cancer Res.* 2021 Mar;10(3):1444-

1456.

36. Prelaj A, Bottiglieri A, Proto C, Lo Russo G, Signorelli D, Ferrara R, et al. *Pozotinib for EGFR and HER2 exon 20 insertion mutation in advanced NSCLC: Results from the expanded access program.* *Eur J Cancer.* 2021 May;149:235-248.

37. Rebuzzi SE, Zullo L, Rossi G, Grassi M, Murianni V, Tagliamento M, **Prelaj A** et al. *Novel Emerging Molecular Targets in Non-Small Cell Lung Cancer.* *Int J Mol Sci.* 2021 Mar 5;22(5):2625.

38. Prelaj A, Pircher CC, Massa G, Martelli V, Corrao G, Lo Russo G, Proto C, et al. *Beyond First-Line Immunotherapy: Potential Therapeutic Strategies Based on Different Pattern Progressions: Oligo and Systemic Progression.* *Cancers (Basel).* 2021 Mar 15;13(6):1300.

39. De Toma A, Lo Russo G, Signorelli D, Pagani F, Randon G, Galli G, **Prelaj A** et al. *Uncommon targets in non-small cell lung cancer: Everyone wants a slice of cake.* *Crit Rev Oncol Hematol.* 2021 Apr;160:103299.

40. Liu Y, Yang S, Zhao J, He Z, Ma J, Guo Y, Wang W, Yoshizawa A, **Prelaj A**, et al. *Cell-free DNA from cerebrospinal fluid can be used to detect the EGFR mutation status of lung adenocarcinoma patients with central nervous system metastasis.* *Transl Lung Cancer Res.* 2021 Feb;10(2):914-925. doi: 10.21037/tlcr-21-62.

41. Ge X, Zhang Z, Zhang S, ... **Prelaj A**, Banna GL, Mutti L, Hu Y, Wang J. *Immunotherapy beyond progression in patients with advanced non-small cell lung cancer.* *Transl Lung Cancer Res.* 2020 Dec;9(6):2391-2400.

42. Lobefaro R, Viscardi G, Di Liello ... **Prelaj A**, et al. *Immunotherapy in advanced Non-Small Cell Lung Cancer patients with poor performance status: The role of clinical-pathological variables and inflammatory biomarkers.* *Lung Cancer.* 2021 Feb;152:165-173.

43. Signorelli D, Proto C, Botta L...., **Prelaj A**, et al. *SMO mutations confer poor prognosis in malignant pleural mesothelioma.* *Transl Lung Cancer Res.* 2020 Oct;9(5):1940-1951. doi: 10.21037/tlcr-19-425.

44. Nichetti F, Lo Russo G, **Prelaj A**, Provenzano L, de Braud F, et al. *ALK/ROS1 rearrangements: A real hallmark for thromboembolic events in cancer patients?* *Thromb Res.* 2020 Oct;194:176-177

45. Prelaj A, Boeri M, Robuschi A, Ferrara R, Proto C, Lo Russo G. et al. *Machine Learning Using Real-World and Translational Data to Improve Treatment Selection for NSCLC Patients Treated with Immunotherapy.* *Cancers (Basel).* 2022 Jan 16;14(2):435. doi: 10.3390/cancers14020435.

46. Spagnoletti A, Platania M, Brambilla M, Occhipinti M, Canziani L, Cabras A, Provenzano L, Leone AG, Ambrosini P, **Prelaj A.** *Systemic lupus erythematosus reactivation afterchemoimmunotherapy in preexisting autoimmune disease.* *Tumori.* 2022 Jan 6:3008916211067565. doi: 10.1177/03008916211067565.

47. Provenzano L, Cuccarini V, Platania M, Canziani L, Spagnoletti A, Doniselli FM, Eoli M, **Prelaj A (Corresponding)**, Anghileri E. *Carcinomatosis under control by osimertinib in EGFR and TP53 mutated lung adenocarcinoma.* *Tumori.* 2021 Dec;107(6):NP136-NP140. doi: 10.1177/03008916211052330. Epub 2021 Nov 2.

48. Perrone F, Belluomini L, Mazzotta M, Bianconi M, Di Noia V, Meacci F, Montrone M, Pignataro D, **Prelaj A**, et al. *Exploring the role of respiratory microbiome in lung cancer: A systematic review.* *Crit Rev Oncol Hematol.* 2021 Aug;164:103404. doi: 10.1016/j.critrevonc.2021.103404. Epub 2021

49. Emma Zattarin... Giuseppe Lo Russo, **Prelaj A (last name).** *Prognostic Role of NLR and EPSILoN score in advanced NSCLC patients treated with chemo-Immunotherapy.* Accepted for publication at *Future Oncology* on 09/05/2022. ID FON-2021-1454.R1.

50. Prelaj A., Bottiglieri A... Proto C. *Case report: exceptional response to pozotinib in patient with metastatic Non-Small Cell Lung Cancer.* Accepted for publication at *Future Oncology* on 16/05/2022. ID manuscript 902967.

51. Viscardi G, Tralongo AC, Massari F, Lambertini M, Mollica V, Rizzo A, Comito F, Di Liello R, Alfieri S, Imbimbo M, Della Corte CM, Morgillo F, Simeon V, Lo Russo G, Proto C, **Prelaj A**, De Toma A, Ferrara R. *Comparative assessment of early mortality risk upon immune checkpoint inhibitors alone or in combination with other agents across solid malignancies: a systematic review and meta-analysis.* *Eur J Cancer.* 2022 Dec;177:175-185. doi: 10.1016/j.ejca.2022.09.031.

52. Banna GL, Friedlaender A, **Prelaj A**, Naqash AR, Auclin E, Garetto L, Mezquita L, Addeo

53. A. *Biological Rationale for Peripheral Blood Cell-Derived Inflammatory Indices and Related Prognostic Scores in Patients with Advanced Non-Small-Cell Lung Cancer*. *Curr Oncol Rep*. 2022 Dec;24(12):1851-1862. doi: 10.1007/s11912-022-01335-8.

54. Russo G, Prelaj A, Occhipinti M, Viscardi G, Capizzuto et al. *Circulating CD81-expressing extracellular vesicles as biomarkers of response for immune-checkpoint inhibitors in advanced NSCLC*. *Front Immunol*. 2022 Sep 20;13:987639. doi: 10.3389/fimmu.2022.987639.

55. Rebuzzi SE, Prelaj A, Friedlaender A, Cortellini A, et al. *Prognostic scores including peripheral blood-derived inflammatory indices in patients with advanced non-small-cell lung cancer treated with immune checkpoint inhibitors*. *Crit Rev Oncol Hematol*. 2022 Nov;179:103806. doi: 10.1016/j.critrevonc.2022.103806

56. Galli G, Corsetto PA, Proto C, Lo Russo G, Ganzinelli M, Rulli E, Legramandi L, Morelli D, Ferrara R, Prelaj A, et al. *Circulating Fatty Acid Profile as a Biomarker for Immunotherapy in Advanced Non-Small Cell Lung Cancer*. *Clin Lung Cancer*. 2022 Nov;23(7):e489-e499. doi: 10.1016/j.clc.2022.07.010

57. Lo Russo G, Sgambelluri F, Prelaj A, Garassino MC. *PEOPLE (NCT03447678), a first-line phase II pembrolizumab trial, in negative and low PD-L1 advanced NSCLC: clinical outcomes and association with circulating immune biomarkers*. *ESMO Open*. 2022 Dec;7(6):100645. doi: 10.1016/j.esmoop.2022.100645.

58. Castelo-Branco L, Morgan G, Prelaj A, Scheffler M, Canhão H, Van Meerbeeck JP, Awada A. *Challenges and knowledge gaps with immune checkpoint inhibitors monotherapy in the management of patients with non-small-cell lung cancer: a survey of oncologist perceptions*. *ESMO Open*. 2023 Jan 12;8(1):100764. doi: 10.1016/j.esmoop.2022.100764.

59. Prelaj A, Galli EG, Miskovic V, Pesenti M, Viscardi G, Pedica B, Mazzeo L et al. *Real-world data to build explainable trustworthy artificial intelligence models for prediction of immunotherapy efficacy in NSCLC patients*. *Frontiers in Oncology* Pub Date: 2023-01-23, DOI:10.3389/fonc.2022.1078822

60. Zanitti, M. Prelaj, et al. (2023). *MetaLung: Towards a Secure Architecture for LungCancer Patient Care on the Metaverse*. *IEEE MetaCom 2023*. Accepted

61. Senthil Kumar K, Miskovic V, Blasiak A, Sundar R, Pedrocchi ALG, Pearson AT, Prelaj A, Ho D. *Artificial Intelligence in Clinical Oncology: From Data to Digital Pathology and Treatment*. *Am Soc Clin Oncol Educ Book*. 2023 May;43:e390084. doi: 10.1200/EDBK_390084. PMID: 37235822.

62. Lo Russo*, G., Prelaj, A*, et al. *PEOPLE (NCT03447678), a phase II trial to test pembrolizumab as first-line treatment in patients with advanced NSCLC with PD-L1 <50%: a multiomics analysis (2023) Journal for immunotherapy of cancer, . *Same contribution DOI: 10.1136/jitc-2023-006833*

63. Prelaj, A., Ganzinelli, M., Trovo, F., Roisman, et a. *The EU-funded I3LUNG Project: Integrative Science, Intelligent Data Platform for Individualized LUNG Cancer Care With Immunotherapy (2023) Clinical Lung Cancer*. 10.1016/j.clc.2023.02.005

64. Castelo-Branco, L., Morgan, G., Prelaj, A., Scheffler, M., Canhão, H. et. *Challenges and knowledge gaps with immune checkpoint inhibitors monotherapy in the management of patients with non-small-cell lung cancer: a survey of oncologist perceptions (2023) ESMO Open, . DOI: 10.1016/j.esmoop.2022.100764*

65. Prelaj A*, Miskovic V* et al. (2023) *Artificial Intelligence for the discovery of predictive biomarkers in immuno-oncology: a systematic review, submitted to Annals Of Oncology*

66. Prelaj A et al. (2023) *APOLLO11 project, consortium in advance lung cancer patients treated with innovative therapies integration of RWD and translational research, submitted to CLC*

Aknowledgements:

ESSENTIAL: THORACIC BOOK SECOND EDITION (BY ESMO: Solange Peter, Marina CH. Garassino): Arselaj Prelaj, for her work on providing the update to the treatment schedules.

Speaker and Oral Presentations
(DEMO) to Predict Outcome of Advanced NSCLC Patients Treated with Immunotherapy", 8th Sep 2019, WCLC2019, Barcelona, (Spain)

Mini Oral section: "MA03.10 Prospective Evaluation of a Prognostic Clinico-Molecular Score (DEMO) to Predict Outcome of Advanced NSCLC Patients Treated with Immunotherapy", 8th Sep 2019, WCLC2019, Barcelona, (Spain)

"Liver metastases and ECOG 2 as negative predictor factors to anti-PD-1 agents in NSCLC: a single

center experience", 20th June 2018, Pescara (Italy)

"Complete blood cell as predictive biomarkers to checkpoint inhibitors in NSCLC patients: a monocentric experience" 20th June 2018, Pescara (Italy)

"Caso Clinico Discussione E Linee Guida " Tumore Della Mammella - (Clinical Case And Line Guide Discussion "Elderly Breast Cancer Patients) 8th Oct 2014, Rome (Italy)

"Controllo della sintomatologia algica nella malattia metastatica" (Control of Pain in elderly patient with metastatic cancer) 6th February 2015, Rome (Italy)

"Controllo della sintomatologia algica nella malattia metastatica", 13th Oct 2015, Rome (Italy)

"Cetuximab vs Panitumumab: Caso clinico" (Cetuximab versus Panitumumab: clinical case in Colon rectal cancer) 1th April 2016, Rieti (Italy)

"Ormonoterapia adiuvante nel pazinte conj tumore della mammella in pre-menopausa" (Adjuvant Hormonotherapy in Pre-menopausal breast cancer patient) 1st Dec 2016 Frascati Rome (Italy).

"Trattamento del NSCLC I linea EGFR mutato e ALK traslocato" 5-6 May 2022, Baveno (Italy)

Poster Presentations

- Prelaj A**, Sara SE, Pizzutilo P, Montrone M , Pesola F, Longo V, Lapadula V, Cassano F, Petrillo P, Bafunno D, Varesano N, Lamorgese V, Mastrandrea A, Ricci D, Catino A, Galetta D. Predictive score using clinical and blood biomarkers in advanced non small cell lung cancer (aNSCLC) patients treated with immunotherapy. *Ann Oncology*, Vol 29, suppl_10, Dec 2018. (Accepted as POSTER at ESMO-Immunoncology 2018 with **Merit Award**).
- Signorelli D, Ferrara R, Proto C, Lo Russo G, Imbimbo M, Galli G, De Toma A, Pagani F, Randon G, Fucà G, Trevisan B, Ganzinelli M, Zilembo N, Fabbri A, De Braud F, Garassino MC, **Prelaj A**. Immune-checkpoints inhibitors in metastatic non small cell lung cancer with rare histology. Abstract 9106 (270539) (Accepted as poster at ASCO 2019)
- Prelaj A**, Lo Russo G, Proto C, Signorelli D, Ferrara R, Galli G, De Toma A, Randon G, Zilembo N, Trevisan B, Montrone M, Longo V, Pesola F, Varesano N, Del Bene G, Pizzutilo P, Galetta D, Garassino MC, Di Maio M, Catino AM. Prognostic score for second or further line immunotherapy in advanced non-small cell lung cancer (aNSCLC): An external validation. (Accepted as ABSTRACT at ASCO 2019)
- C. Proto, **A. Prelaj**, C. Verri, D. Signorelli, G. Lo Russo, R. Ferrara, G. Galli, B. Trevisan, M. Mavis, F. G. De Braud, MC. Garassino, G. Sozzi, M. Boeri. A plasma miRNA signature classifier identifies PD-L1 \geq 50% NSCLC nonresponders to immune checkpoint inhibitors. (Accepted as POSTER at ASCO 2019)
- Galli G, Corsetto PA, Ferrara R, **Prelaj A**, Proto C, Signorelli D, Zilembo N, De Toma A, Pagani F, Randon G, Ganzinelli M, Sica A, de Braud F, Garassino MC, Lo Russo G. Impact of cholesterolemia and body mass index on outcome of metastatic non small cell lung cancer treated with immunotherapy. (Accepted as ABSTRACT at ASCO 2019)
- G. Lo Russo, D. Signorelli, C. Proto, G. Galli, A. **Prelaj**, R. Ferrara, M. Sommariva, M. Moro, V. Cancila, M. Ganzinelli, S. Brich, S. Sangaletti, G. Pruneri, C. Tripodo, M.P. Colombo, L. Rivoltini, A. Balsari, G. Sozzi, M. Boeri, M. Garassino. OA14.06 Hyperprogressive disease in advanced non-small cell lung cancer patients treated with immune checkpoint inhibitors. (Oral Presentation at WCLC 2019).
- C. Proto, **A. Prelaj**, C. Verri, D. Signorelli, G. Lo Russo, R. Ferrara, G. Galli¹, B. Trevisan¹, M. Mensah¹, F. De Braud, M. Garassino¹, G. Sozzi², M. Boeri². MA07.03 a circulating micromas-based test as Biomarker of primary and secondary resistance In pd-H1 \geq 50% nscL treated with immunotherapy (Mini Oral Presentation at WCLC 2019).
- G. Galli, A. De Toma, F. Pagani, G. Randon, B. Trevisan, **A. Prelaj**, R. Ferrara, C. Proto, D. Signorelli, M. Ganzinelli, N. Zilembo, F. De Braud², M. Garassino, G. Lo Russo. P1.04-38 efficacy and safety of immunotherapy In elderly patients with non-small cell lung Cancer. (Accepted as POSTER at WCLC 2019)
- G. Randon, G. Galli, A. De Toma, F. Pagani, B. Trevisan, D. Signorelli, C. Proto, **A. Prelaj**, R. Ferrara, M. Ganzinelli, L. Pallavicini, R. Di Mauro, N. Zilembo, F. De Braud, M. Garassino, G. Lo Russo. P1.01-135 Salvage chemotherapy after Immunotherapy failure in non-small-cell lung Cancer patients (Accepted as POSTER at WCLC 2019)
- Prelaj A**, Rebuzzi SE, Del Bene G, Giròn Berrios JG, Emiliani A, Lucilla De Filippis, Prete AA, Pecorari S, Manna G, Ferrara C, Rossini D, Longo F. Evaluation of the efficacy of cisplatin-etoposide, the role of thoracic radiotherapy and prophylactic cranial irradiation as first-line treatment in Large Cell Neuroendocrine Carcinoma compared to Small Cell Lung Cancer. *EJC* Vol. 72, Suppl. 1, Feb. 2017 (Accepted as POSTER at ECCO 2017)

11. **Prelaj A**, P. Pizzutilo, M. Montrone, F. Cassano, F. Pesola, V. Lapadula, P. Petrillo, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino, D. Galetta. Prognostic and Predictive Role of Peripheral Blood Biomarkers in NSCLC Patients Treated with Checkpoint, a Single-Center Experience. *JTO* Vol 13, Issue 10, Suppl, Page S926. (Accepted as ABSTRACT at WCLC 2018)
12. **Prelaj A**, S.E. Rebuzzi, P. Pizzutilo, M. Bilancia, M. Montrone, F. Pesola, V. Longo, G. Del Bene, V. Lapadula, F. Cassano, P. Petrillo, D. Bafunno, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino, D. Galetta. Time-series of peripheral blood biomarkers as biomarkers for immunotherapy in advanced non-small cell lung cancer (aNSCLC) patients. *Annals of Oncology*, Vol 30, Issue Suppl_2, April 2019, mdz067.004. (Accepted as POSTER ELCC 2019)
13. Passaro A, **Prelaj A**, G. Spitaleri, E. Del Signore, G. Rossi, E. Guerini-Rocco, M. Barberis, C. Catania, F. de Marinis. Clinical and Treatment Features Associated with Improved 5-Years Survival Rate in ALK-Positive Lung Cancer Treated With ALK-TKIs. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019, mdz063.042. (Accepted as POSTER ELCC 2019)
14. Galli, C. Proto, D. Signorelli, M. Imbimbo¹, R. Ferrara, A. **Prelaj**, A. De Toma, G. Randon, B. Trevisan, M. Ganzinelli, N. Zilembo, M. Garassino, G. Lo Russo. Characterization of patients with metastatic Non Small Cell Lung Cancer obtaining Long Term Benefit from Immunotherapy. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019, (Accepted as POSTER ELCC 2019)
15. **A. Prelaj**, S.E. Rebuzzi, P. Pizzutilo, M. Bilancia, M. Montrone, F. Pesola, V. Longo, G. Del Bene, V. Lapadula, F. Cassano, P. Petrillo, D. Bafunno, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino 3, D. Galetta 3; Peripheral blood biomarkers as prognostic factors for immunotherapy in advanced non-small cell lung cancer (aNSCLC) patients. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019. (Accepted as POSTER ELCC 2019)
16. **A. Prelaj**, S.E. Rebuzzi, P. Pizzutilo, M. Bilancia, M. Montrone, F. Pesola, V. Longo, G. Del Bene, V. Lapadula, F. Cassano, P. Petrillo, D. Bafunno, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino, D. Galetta. EPSILoN score: validation cohort of a prognostic score in advanced nonsmall cell lung cancer (aNSCLC) patients treated with immunotherapy. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019. (Accepted as POSTER at ELCC 2019)
17. Passaro A, **Prelaj A**, G. Spitaleri, E. Del Signore, G. Rossi, E. Guerini-Rocco, M. Barberis, C. Catania, F. de Marinis. Clinical and Treatment Features Associated with Improved 5-Years Survival Rate in ALK-Positive Lung Cancer Treated With ALK-TKIs. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019, mdz063.042. (Accepted as POSTER ELCC 2019)
18. Galli, C. Proto, D. Signorelli, M. Imbimbo¹, R. Ferrara, A. **Prelaj**, A. De Toma, G. Randon, B. Trevisan, M. Ganzinelli, N. Zilembo, M. Garassino, G. Lo Russo. Characterization of patients with metastatic Non Small Cell Lung Cancer obtaining Long Term Benefit from Immunotherapy. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019, (Accepted as POSTER ELCC 2019)
19. **A. Prelaj**, S.E. Rebuzzi, P. Pizzutilo, M. Bilancia, M. Montrone, F. Pesola, V. Longo, G. Del Bene, V. Lapadula, F. Cassano, P. Petrillo, D. Bafunno, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino 3, D. Galetta 3; Peripheral blood biomarkers as prognostic factors for immunotherapy in advanced non-small cell lung cancer (aNSCLC) patients. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019. (Accepted as POSTER ELCC 2019)
20. **A. Prelaj**, S.E. Rebuzzi, P. Pizzutilo, M. Bilancia, M. Montrone, F. Pesola, V. Longo, G. Del Bene, V. Lapadula, F. Cassano, P. Petrillo, D. Bafunno, N. Varesano, V. Lamorgese, A. Mastrandrea, D. Ricci, A. Catino, D. Galetta. EPSILoN score: validation cohort of a prognostic score in advanced nonsmall cell lung cancer (aNSCLC) patients treated with immunotherapy. *Ann Oncology*, Vol 30, Issue Suppl_2, April 2019. (Accepted as POSTER at ELCC 2019)
21. Bene GD, **Prelaj A**, Berrios JR, Filippis LD, Emiliani A, Galletti A, Ferrara C, Longo F. First-Line Treatment with Cisplatin plus Etoposide for Small Cell Lung Cancer and Large Cell Neuroendocrine Carcinoma: our center experience. *J Thorac Oncol*. 2016 Apr; (Accepted as POSTER at ELCC 2016)
22. S.E. Rebuzzi, **A. Prelaj**, C. Pozzi, C. Ferrara, V. Fratellizzi, G.A. Follacchio, G. de Vincentis, S. Tomao, V. Bianco. Radium-223 in metastatic castration-resistant prostate cancer (mCRPC): efficacy and safety in real-life experience. *Ann Oncology* Oct 2017, Vol 28, Suppl 6 (Accepted as POSTER at AIOM 2017)
23. **Prelaj et al**, Pizzutilo P, Montrone M, Cassano F, Pesola F, Lapadula V, Petrillo P, Bafunno D, Varesano N, Lamorgese V, Mastrandrea A, Ricci D, Catino A and Domenico G. NSCLC, immunotherapy and peripheral blood biomarkers as predictor of response: a retrospective study from a single center experience. *Tumori Journal* 2018, Vol. 104(4S) 6– 224. (Accepted as POSTER at AIOM 2018).

24. Domenico G, Pizzutilo P, Montrone M, Cassano F, Pesola F, Lapadula V, Petrillo P, Bafunno D, Varesano N, Lamorgese V, Mastrandrea A, Ricci D, Catino A and **Prelaj A**. Negative and positive predictor clinical and biochemical factors of response to anti-PD-1 agents in NSCLC: a single center experience". *Tumori Journal* 2018, Vol. 104(4S) 6–224. (Accepted as POSTER at AIOM 2018)
25. Pizzutilo P, **Prelaj A**, Montrone M, Cassano F, Pesola F, Lapadula V, Petrillo P, Varesano N, Bafunno D, Mastrandrea A, Ricci D, Lamorgese V, Catino A and Domenico G. Overall Survival and detection of ALK positive patients in lung adenocarcinoma". *Tumori Journal* 2018, Vol. 104(4S) 6–224. (Accepted as POSTER at AIOM 2018)
26. **A Prelaj**, S.E. Rebutzi, J.R. Giron Berrios, S. Pecorari, C. Fusto, C. Ferrara, M. Salvati, S. Tomao, V. Bianco Concomitant versus sequential Fotemustine and Bevacizumab in recurrent malignant gliomas: treatment response and survival outcomes in a retrospective analysis. *Ann Oncology* Oct 2017, Vol 28, Supp 6 (Accepted as ABSTRACT at AIOM 2017)
27. G. Manna, F.S Di Lisa, I. Speranza, T. Losanno, A. Giuli, A. Emiliani, A. A. Prete, **A. Prelaj**, S. Pecorari, J.R Giron Berrios, C. Fusto, P. Seminara. The power of traditional prognostic factor and immunohistochemical (IHC) surrogate molecular subtypes of breast cancer (BC) in predicting neoadjuvant chemotherapy response: results of a retrospective study Abstract nr. F45 Published on *Annals of Oncology* Vol 27 Supp 4 2016. (Accepted as ABSTRACT at AIOM 2017)
28. Emiliani A, Prete AA, **Prelaj A**, Del Bene G, Speranza I, Seminara P, Cortesi E, Longo F. Nivolumab In Non Small Cell Lung Cancer: General And Immune-Related Toxicities In The Real Life. *Ann Oncology* Vol 27 Supp 4 2016. (Accepted as POSTER at AIOM 2016)
29. **Prelaj A**, Rebutzi SE, Salvati M, Pozzi C, Ferrara C, Tomao S, Bianco V. A retrospective analysis to evaluate the off-label use of Bevacizumab in recurrent malignant gliomas. Abstract nr. S47. *Annals of Oncology* Vol.27 Supp.4 2016 (Accepted as ABSTRACT at AIOM 2016)
30. **Prelaj A**, Pizzutilo P, Montrone M, Cassano F, Pesola F, Longo V, Lapadula V, Petrillo P, Bafunno D, Varesano N, Lamorgese V, Mastrandrea A, Ricci D, Catino A, Galetta D. Serum biomarkers: CEA, Cyfra 2.1 and Ca125 and LDH can predict response to checkpoint inhibitors in NSCLC: retrospective study from a single center experience. (Accepted as POSTER at GOIM 2018).

Honors and awards

Esmo Clinical Unit Visit **Award** 2017 with Grant in Manchester, United Kingdom.
 Esmo Immun-Oncology 2018, Abstract **Merit Award with grant**, Ginevra, Switzerland.
 Premio Giovani Ricercatori Istituto Tumori di Milano 2021

Clinical trials and Protocols

Sub-Investigator in more than 50 PHASE III Clinical Trials e.g.: KYENOTE-189, KEYNOTE-045, CHECKMATE-017, CHECKMATE-057, CA209-227, ALEX, EXELIXIS, JANSEN, ZENITH20, JNJ-61186372. Investigator for many Expanded Access Program e.g.: CA209-169, Poziotinib, Lorlatinib, Brigatinib, Blu667 etc.

Preceptorship

Preceptorship in Lung Cancer Manchester, 1-3 March 2017 and 07-9 March 2018

Conferences and seminars from 2008 to 2022 attended more than 200 International and Italian conferences and seminars based on Medical Oncology (Basic research, epidemiology, diagnosis and treatment), especially focused on Thoracic Cancers.

Certifications

The National Institutes of Health (NIH) Office of Extramural Research certifies that ARSELA PRELAJ successfully completed the NIH Web-based training course "Protecting Human Research Participants". 2636272

Training Certificate of Good Clinical Practice version n.1 (18-May-2015), identified by TransCelerate.

Basic Life Support, Hospital Policlinico Umberto I, 2013, Rome, Italy

Basic Life Support, 21st Dec 2018,, Fondazione IRCCS, Istituto Nazionale Tumori, Milan, Italy.

Basic Life Support, Dec 2022, Fondazione IRCCS, Istituto Nazionale Tumori, Milan, Italy. Advance Life Support, 05-06 Nov 2019, Fondazione IRCCS, Istituto Nazionale Tumori, Milan, Italy.

Grants

Call: HORIZON-HLTH-DTH-2021-CARE-05-02 (Better Health and care, economic growth and sustainable health systems). Project Title: **"I3LUNG: Integrative science, Intelligent data platform for Individualized LUNG cancer care with Immunotherapy"**

I have recently granted as principal Investigator and Coordinator (10 million euro) a recent very Big Horizon Europe (H2021-2027 program) project (I3LUNG) among 16 partners regarding NSCLC, immunotherapy and Artificial Intelligence decision making tools aiming at the development of an EU and extra EU (USA, Israel) platform on real-world and multiomics data.

Bando Istituzionale BRI 2021: I have granted as PI and Coordinator an Italian Pilot project (500.000 euro): APOLLO 11 project a big Italian Network of advance lung cancer on Translational Research and Real-World with the aim to develop a national database and a standardized virtual biobank among centres.

Partecipation Grant: FMFLC/IASLC Joint Fellowship Award for the Early Detection of Lung Cancer Application

Project title: *“Efficacy of volatile organic compounds (VOCs) in exhaled air, urine and blood headspace sample in combination with circulating microRNA for the early detection of lung cancer”*

RADIOMICS to predict Immunotherapy in NSCLC, in collaboration with Politecnico of Milan

Memberships

Full Members of American Society of Clinical Oncology (ASCO)

Full Members of European Society for Medical Oncology (ESMO)

Full Members of Lung Cancer Association Research (IASLC)

Full Members of European School of Oncology (ESO)

Full Members of Associazione Italiana Oncologia Medica (AIOM)

Full Members of American Association for Cancer Research (AACR)

Committee Member of ESMO Real world data and digital health in oncology Working Group

Main focus *from Nov 2019 I started a PhD in Bioengineering and Artificial Intelligence (AI) at the University Politecnico di Milano. The large-scale analysis of big data using AI is seen as the basis for a real revolution thanks to the possibility of analysing epidemiological, clinical, biological, molecular and radiological information with a precision never before achieved. I believe that there is a need for next generation scientist/oncologist able to better understands the power of big data and interpret results deriving from them working closely with bioengineers. During these three years-PhD I focused my experience in different digital fields. In particular, I'm a principal investigator of many projects and studies focused on NSCLC and: 1) radiomics 2) Digital Pathology 3) genomics where the use of AI methodologies such as machine and deep learning (and Explainable Trustworthy AI (using software such as MATLAB and PYTHON) have been applied to find out predictive algorithms for treatments efficacy or molecular resistance occurrence etc.*

Milano, 5/07/2023

dott.ssa Arsela Prelaj

