



First Name: Alessandro

Last Name: Di Federico

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Current position

Medical oncologist:

IRCCS Policlinico Sant'Orsola-Malpighi, Bologna, Italy

PhD student:

Ematologia, Oncologia e Patologia.
University of Bologna.

Education and training

July 2011:

Secondary School Diploma at Liceo Classico "G.B. Vico",
Chieti, Italy.

September 2015–July 2016:

Erasmus Fellowship at Universidad Complutense de Madrid,
Hospital Clinico San Carlos, Madrid, Spain (1 year of medical
school).

August 2016–September 2016:

1 month of medical school traineeship at Mother Theresa
University Hospital, Skopje, North Macedonia.

17 October 2017:

Degree in Medicine and Surgery at University of Parma.
Thesis: "Impact of combined structural and immune features
on NSCLC clinical outcome"
Final grade: 110/110 cum laude

13 February 2018:

License to practice as Medical Doctor. Ordine dei Medici
Chirurgi e degli Odontoiatri di Chieti, Italy.

November 2018–November 2023:

Fellowship (residency) in Medical Oncology at IRCCS
Azienda Ospedaliero-Universitaria di Bologna, S.Orsola-
Malpighi Hospital, University of Bologna, Italy.

July 2022–November 2023:

Research Fellowship (Position of Visiting Scientist) at the
Lowe Center for Thoracic Oncology, Dana-Farber Cancer
Institute, Harvard Cancer Center (Boston, US)
Mentor: Mark M. Awad, MD.

December 2022–September 2023:

2023 Association for the Study of Lung Cancer (IASLC)
Academy

June 2021:

IHC Good Clinical Practice certificate

Language Skills

Italian: Mother tongue

English: Listening C2, Reading C2, Writing C2, Speaking C1

Spanish: Listening C2, Reading C2, Writing C1, Speaking C1 (DELE C1 certification)

Digital and Computational Skills

Advanced user of many software and informatic tools that can help my work as a clinician and researcher in oncology, such as R Studio, Prism, Review Manager (RevMan), Comprehensive Meta-Analysis, Microsoft Excel and the complete Microsoft Office package (Word, Power Point etc.), REDCap, Google Drive, Social Medias. Experience with working on online large genomic and clinicopathologic databases, such as cBioPortal, The Cancer Genome Atlas (TCGA), and GENIE, and with the use of informatic tools for cancer genomics, such as COSMIC, OncoKB, CiVIC and VarSome. Access to the Surveillance, Epidemiology, and End Results (SEER) database.

Communication and Interpersonal Skills

Ability to communicate to individuals and groups, organize events, make presentations, and respond to questions in both educational and workplace settings. Skills developed during my medical school and my experiences abroad to study in Madrid (Erasmus Fellowship of one academic year during the med school) and Skopje, North Macedonia (1-month traineeship during the med school), and during my work experience as a Medical Oncology Resident/Fellow and Fellows' representative at IRCCS Policlinico Sant'Orsola-Malpighi, and as a research fellow at the Dana-Farber Cancer Institute (Boston, US).

Reviewing and Editorial Activity

Associate Editor for Cancer Immunology, Immunotherapy. Review Editor for Frontiers in Oncology and Frontiers in Immunology. Invited Guest Editor for Diagnostics.

Ad-hoc reviewer for several highly impacted journals, including Journal of Thoracic Oncology, BMC Medicine, Critical Reviews in Oncology/Hematology, Nature Scientific Reports and Journal of Cancer Research and Clinical Oncology.

Active Memberships

Active member of the European Society for Medical Oncology (ESMO), International Association for the Study of Lung Cancer (IASLC), and Society for ImmunoTherapy of Cancer (SITC).

Activity in International Oncology Societies

I served as the Society for Immunotherapy of Cancer (SITC) meeting correspondent for the ESMO Immuno-Oncology conference 2023.

Peer-reviewed publications

(*co-first authorship; +corresponding authorship)

1. **Di Federico A**, Filippini DM, Dall'Olio FG, et al. The EGFR Exon 19 Mutant L747-A750>P Exhibits Distinct Sensitivity to Tyrosine Kinase Inhibitors in Lung Adenocarcinoma-Letter. *Clin Cancer Res.* 2020;26(2):518-519. doi:10.1158/1078-0432.CCR-19-2441
2. Gelsomino F, **Di Federico A**, Filippini DM, et al. Overcoming Primary Resistance to PD-1 Inhibitor With Anti-PD-L1 Agent in Squamous-Cell NSCLC: Case Report. *Clin Lung Cancer.* 2020;21(2):e45-e48. doi:10.1016/j.clcc.2019.11.011
3. Lamberti G, Andrini E, Sisi M, **Di Federico A**, Ricciuti B. Targeting DNA damage response and repair genes to enhance anticancer immunotherapy: rationale and clinical implication. *Future Oncol.* 2020;16(23):1751-1766. doi:10.2217/fo-2020-0215
4. Dall'Olio FG, Conci N, Rossi G, Fiorentino M, De Giglio A, Grilli G, Altimari A, Gruppioni E, Filippini DM, **Di Federico A**, Nuvola G, Ardizzoni A. Comparison of Sequential Testing and Next Generation Sequencing in advanced Lung Adenocarcinoma patients – A single centre experience. *Lung Cancer.* Published online 2020. doi:10.1016/j.lungcan.2020.08.008
5. Lamberti G, Andrini E, Sisi M, Rizzo A, Parisi C, **Di Federico A**, Gelsomino F, Ardizzoni A. Beyond EGFR, ALK and ROS1: current evidence and future perspectives on newly targetable oncogenic drivers in lung adenocarcinoma. *Crit Rev Oncol Hematol.* Published online 2020. doi:10.1016/j.critrevonc.2020.103119
6. **Di Federico A**⁺, Nuvola G, Sisi M, Lenzi B, Nobili E, Campana D. Hyperammonemic encephalopathy during XELOX regimen. Is it capecitabine or oxaliplatin responsible? *Anticancer Drugs.* Published online 2020. doi:10.1097/cad.0000000000000987
7. Rizzo A, **Di Federico A**, Ricci AD, et al. Targeting BRAF-Mutant Biliary Tract Cancer: Recent Advances and Future Challenges. *Cancer Control.* 2020 Jan-Dec;27(1):1073274820983013. doi: 10.1177/1073274820983013. PMID: 33356500.
8. Di Marco M, Carloni R, De Lorenzo S, Mosconi C, Palloni A, Grassi E, Filippini DM, Ricci AD, Rizzo A, **Di Federico A**, et al. Pancreatic mucinous cystadenocarcinoma in a patient harbouring BRCA1 germline mutation effectively treated with olaparib: A case report. *World J Gastrointest Oncol.* 2020 Dec 15;12(12):1456-1463. doi: 10.4251/wjgo.v12.i12.1456. PMID: 33362915; PMCID: PMC7739147.
9. **Di Federico A**, Rizzo A, Ricci AD, Frega G, Palloni A, Tavolari S, Brandi G. Nivolumab: an investigational agent for the treatment of biliary tract cancer. *Expert Opin Investig Drugs.* 2020 Dec 23:1-8. doi: 10.1080/13543784.2021.1863946. Epub ahead of print. PMID: 33307866.
10. **Di Federico A**, Andrini E, Sisi M, et al. Single-agent carboplatin in extensive disease small-cell lung cancer patient with liver failure: a case report within the experience of a single institution. *Anticancer Drugs.* 2021 Mar 1. doi: 10.1097/CAD.0000000000001057. Epub ahead of print. PMID: 33661187.

11. **Di Federico A⁺**, Filippini DM, Sperandi F, Ardizzoni A, Melotti B. Acute kidney injury as a possible immune-related adverse event associated with sustained complete response to BRAF and MEK inhibitors in advanced, V600E-mutated melanoma. *Eur J Cancer*. 2021 Feb 19;147:58-59. doi: 10.1016/j.ejca.2021.01.026. Epub ahead of print. PMID: 33618198.
12. **Di Federico A⁺**, De Giglio A, Parisi C, Gelsomino F, Ardizzoni A. PD-1/PD-L1 inhibitor monotherapy or in combination with chemotherapy as upfront treatment for advanced NSCLC with PD-L1 expression $\geq 50\%$: selecting the best strategy, *Critical Reviews in Oncology/Hematology*, 2021, 103302, ISSN 1040-8428, <https://doi.org/10.1016/j.critrevonc.2021.103302>.
13. Rizzo A, Ricci AD, Frega G, **Di Federico A**, Brandi G. FGFR inhibitors in elderly patients with advanced biliary tract cancer: an unsolved issue. *Expert Rev Gastroenterol Hepatol*. 2021 Apr 5:1-8. doi: 10.1080/17474124.2021.1911646. Epub ahead of print. PMID: 33787429.
14. **Di Federico A⁺**, Nuvola G, Deiana C, Donati G, De Giglio A. IMpower 132: Is the Second Exception to the Rule No Longer an Exception? *J Thorac Oncol*. 2021 May;16(5):e29-e30. doi: 10.1016/j.jtho.2021.01.003. PMID: 33896575.
15. Rossi S, Merli E, Rinaldi R, Deleonardi G, Mastrangelo V, Sasdelli AS, **Di Federico A**, et al. Paraneoplastic vs. non-paraneoplastic anti-Hu associated dysmotility: a case series and literature review. *J Neurol*. 2022 Mar;269(3):1182-1194. doi: 10.1007/s00415-021-10577-8. Epub 2021 May 2. PMID: 33934212.
16. Filippini DM, **Di Federico A⁺**, Lenzi B, Nobili E, Brocchi S, Malvi D, Brandi G. Critical diagnostic delay associated with unusual presentation of hepatocellular carcinoma (HCC) with orbital metastases: a case report. *Ann Palliat Med*. 2021 May 11:apm-20-2331. doi: 10.21037/apm-20-2331. Epub ahead of print. PMID: 33977731.
17. Rizzo A, Dadduzio V, Ricci AD, Massari F, **Di Federico A**, Gadaleta-Caldarola G, Brandi G. Lenvatinib plus pembrolizumab: the next frontier for the treatment of hepatocellular carcinoma? *Expert Opin Investig Drugs*. 2021 Jun 30:1-8. doi: 10.1080/13543784.2021.1948532. Epub ahead of print. PMID: 34167433.
18. **Di Federico A**, Tateo V, Parisi C, et al. Hacking Pancreatic Cancer: Present and Future of Personalized Medicine. *Pharmaceuticals*. 2021; 14(7):677. <https://doi.org/10.3390/ph14070677>
19. **Di Federico A**, De Giglio A, Parisi C, Gelsomino F, Boni L, Ardizzoni A. PD-1 inhibitors versus PD-L1 inhibitors in addition to chemotherapy for the first-line treatment of advanced non-small cell lung cancer (NSCLC): a systematic review and meta-analysis. *JTO Clin Res Reports*. Published online 2021:100214. doi:<https://doi.org/10.1016/j.jtocrr.2021.100214>
20. Brandi G, **Di Federico A***, Rizzo A, et al. The power of kindness: curative treatment with metronomic combination in advanced hepatocellular carcinoma. *Anticancer Drugs*. 2022;33(1):e781-e783. doi:10.1097/CAD.0000000000001202

21. **Di Federico A⁺**, De Giglio A, Nuvola G, Deiana C, Conci N, Gelsomino F, Ardizzoni A. PD-(L)1 inhibitors as single-agent or in combination with chemotherapy for advanced, PD-L1-high non-small cell lung cancer: a meta-analysis. *Future Oncol.* 2021 Nov;17(32):4415-4424. doi: 10.2217/fon-2021-0328. Epub 2021 Aug 17. PMID: 34402681.
22. De Giglio A, **Di Federico A**, Gelsomino F, Ardizzoni A. Prognostic relevance of pleural invasion for resected NSCLC patients undergoing adjuvant treatments: A propensity score-matched analysis of SEER database. *Lung Cancer.* 2021 Nov;161:18-25. doi: 10.1016/j.lungcan.2021.08.017. Epub 2021 Sep 2. PMID: 34492552.
23. **Di Federico A**, Gelsomino F, De Biase D, Ardizzoni A. Should We Test Cancer Susceptibility Genes in Routinely Used Multigene Panels? A Case of Synchronous Lung Adenocarcinoma and Breast Cancer Associated With Germline CHEK2 Mutation. *Clin Lung Cancer.* 2022 Jun;23(4):e283-e284. doi: 10.1016/j.clcc.2021.09.011. Epub 2021 Oct 10. PMID: 34772625.
24. De Giglio A, **Di Federico A**, Nuvola G, Deiana C, Gelsomino F. The Landscape of Immunotherapy in Advanced NSCLC: Driving Beyond PD-1/PD-L1 Inhibitors (CTLA-4, LAG3, IDO, OX40, TIGIT, Vaccines). *Curr Oncol Rep.* 2021 Aug 27;23(11):126. doi: 10.1007/s11912-021-01124-9. PMID: 34453261; PMCID: PMC8397682.
25. **Di Federico A⁺**, De Giglio A, Parisi C, Gelsomino F. STK11/LKB1 and KEAP1 mutations in non-small cell lung cancer: Prognostic rather than predictive? *Eur J Cancer.* 2021 Nov;157:108-113. doi: 10.1016/j.ejca.2021.08.011. Epub 2021 Sep 6. PMID: 34500370.
26. **Di Federico A⁺**, Rizzo A, Carloni R, De Giglio A, Bruno R, Ricci D, Brandi G. Atezolizumab-bevacizumab plus Y-90 TARE for the treatment of hepatocellular carcinoma: preclinical rationale and ongoing clinical trials. *Expert Opin Investig Drugs.* 2022 Apr;31(4):361-369. doi: 10.1080/13543784.2022.2009455. Epub 2021 Dec 1. PMID: 34798793.
27. Rizzo A, Ricci AD, Lanotte L, Lombardi L, **Di Federico A**, Brandi G, Gadaleta-Caldarola G. Immune-based combinations for metastatic triple negative breast cancer in clinical trials: current knowledge and therapeutic prospects. *Expert Opin Investig Drugs.* 2022 Jun;31(6):557-565. doi: 10.1080/13543784.2022.2009456. Epub 2021 Dec 13. PMID: 34802383.
28. Rizzo A, Ricci AD, **Di Federico A**, Frega G, Palloni A, Tavolari S, Brandi G. Predictive Biomarkers for Checkpoint Inhibitor-Based Immunotherapy in Hepatocellular Carcinoma: Where Do We Stand? *Front Oncol.* 2021 Dec 17;11:803133. doi: 10.3389/fonc.2021.803133. PMID: 34976841; PMCID: PMC8718608.
29. Rizzo A, **Di Federico A**, Palmiotti G, Brandi G. Ramucirumab or merestinib in biliary tract cancer: new combinations, old mistakes? <https://doi.org/10.1080/23808993.2022.2095903>. 2022;7(1):60-61. doi:10.1080/23808993.2022.2095903
30. **Di Federico A**, Filetti M, Palladini A, Giusti R, Piras M, De Giglio A, Ardizzoni A, Gelsomino F. EGFR-RAD51 gene fusion NSCLC responsiveness to different generation EGFR-TKIs: two

cases and review of the literature. *Transl Lung Cancer Res.* 2022 Mar;11(3):497-503. doi: 10.21037/tlcr-21-888. PMID: 35399574; PMCID: PMC8988076.

31. Gelsomino F, **Di Federico A**, Tardio ML, Grilli G, D'Errico A, Ardizzoni A, Salvagni S. Drug-induced colitis on BRAF and MEK inhibitors for BRAF V600E-mutated non-small cell lung cancer: a case report. *Invest New Drugs.* 2022 Feb;40(1):190-193. doi: 10.1007/s10637-021-01166-7. Epub 2021 Aug 26. PMID: 34436699; PMCID: PMC8763820.

32. Carloni R, Rizzo A, Ricci AD, Frega G, **Di Federico A**, Palloni A, Marco MD, Gadaleta-Caldarola G, Brandi G. Dual immune checkpoint blockade in hepatocellular carcinoma: where do we stand? *Future Oncol.* 2022 Mar;18(8):1023-1034. doi: 10.2217/fon-2021-0905. Epub 2022 Feb 3. PMID: 35109664.

33. De Giglio A, Deiana C, **Di Federico A**. Bone-specific response according to MDA criteria predicts immunotherapy efficacy among advanced non-small cell lung cancer (NSCLC) patients. *J Cancer Res Clin Oncol.* 2022 Jun 24. doi: 10.1007/s00432-022-04120-z. Epub ahead of print. PMID: 35750899.

34. **Di Federico A**⁺, Mosca M, Pagani R, et al. Immunotherapy in Pancreatic Cancer: Why Do We Keep Failing? A Focus on Tumor Immune Microenvironment, Predictive Biomarkers and Treatment Outcomes. *Cancers (Basel).* 2022 May 14;14(10):2429. doi: 10.3390/cancers14102429. PMID: 35626033; PMCID: PMC9139656.

35. De Giglio A, **Di Federico A**, Deiana C, Ricciuti B, Brambilla M, Metro G. Advanced non-small-cell lung cancer: how to manage non-oncogene disease. *Drugs Context.* 2022 Jul 8;11:2022-2-4. doi: 10.7573/dic.2022-2-4. PMID: 35912001; PMCID: PMC9281971.

36. **Di Federico A**⁺, De Giglio A, Gelsomino F, et al. Genomic Landscape, Clinical Features and Outcomes of Non-Small Cell Lung Cancer Patients Harboring BRAF Alterations of Distinct Functional Classes. *Cancers (Basel).* 2022 Jul 17;14(14):3472. doi: 10.3390/cancers14143472. PMID: 35884534; PMCID: PMC9319412.

37. Rizzo A, Carloni R, Frega G, Palloni A, **Di Federico A**, et al. Intensive Follow-Up Program and Oncological Outcomes of Biliary Tract Cancer Patients after Curative-Intent Surgery: A Twenty-Year Experience in a Single Tertiary Medical Center. *Curr Oncol.* 2022 Jul 19;29(7):5084-5090. doi: 10.3390/curreoncol29070402. PMID: 35877262; PMCID: PMC9322137.

38. Metro G, De Giglio A, Ricciuti B, Siringo M, Marinelli D, Gelibter A, Pecci F, Berardi R, Cantini L, **Di Federico A**, et al. Advanced non-small-cell lung cancer: how to manage EGFR and HER2 exon 20 insertion mutation-positive disease. *Drugs Context.* 2022 Jul 29;11:2022-3-9. doi: 10.7573/dic.2022-3-9. PMID: 35975031; PMCID: PMC9354707.

39. Rizzo A, Carloni R, Ricci AD, **Di Federico A**, Guven DC, Yalcin S, Brandi G. Molecular Profile and Prognostic Value of BAP1 Mutations in Intrahepatic Cholangiocarcinoma: A Genomic

Database Analysis. *J Pers Med*. 2022 Jul 29;12(8):1247. doi: 10.3390/jpm12081247. PMID: 36013199; PMCID: PMC9410256.

40. Carloni R, Rizzo A, Cusmai A, Palloni A, **Di Federico A**, Marco MD, Massafra R, Fanizzi A, Palmiotti G, Brandi G. Advances in novel systemic therapies for advanced hepatocellular carcinoma. *Future Med Chem*. 2022 Aug 23. doi: 10.4155/fmc-2022-0045. Epub ahead of print. PMID: 35997677.

41. Carloni R, Rizzo A, Ricci AD, **Di Federico A**, De Luca R, Guven DC, Yalcin S, Brandi G. Targeting tumor microenvironment for cholangiocarcinoma: Opportunities for precision medicine. *Transl Oncol*. 2022 Aug 14;25:101514. doi: 10.1016/j.tranon.2022.101514. Epub ahead of print. PMID: 35977458; PMCID: PMC9396390.

42. Bian D, Jiang S, Xiong Y, Qi M, Wu J, Addeo A, Yamauchi Y, Manapov F, Dempke WCM, Vannucci J, **Di Federico A**, Xu X, Chen L. Efficacy evaluation of surgery combined with chemotherapy for stage IIIA small cell lung cancer patients: a retrospective analysis. *Transl Lung Cancer Res*. 2022;11(8):0-0. doi:10.21037/TLCR-22-545

43. De Giglio A, **Di Federico A**, Metro G. Exploring immune checkpoint inhibition in combination with anti-angiogenic therapy for patients with EGFR- or ALK-positive advanced non-small cell lung cancer. *Transl Lung Cancer Res*. 2022;0(0):0-0. doi:10.21037/TLCR-22-492

44. De Giglio A, Aprile M, **Di Federico A**, et al. Impact of Baseline Versus Intercurrent Steroids Administration on Upfront Chemo-Immunotherapy for Advanced Non-Small Cell Lung Cancer (NSCLC). *Int J Mol Sci* 2022, Vol 23, Page 10292. 2022;23(18):10292. doi:10.3390/IJMS231810292

45. Rizzo A, Salati M, Frega G, Merz V, Caputo F, **Di Federico A**, et al. Second-Line Chemotherapy in Elderly Patients with Advanced Biliary Tract Cancer: A Multicenter Real-World Study. *Med* 2022, Vol 58, Page 1543. 2022;58(11):1543. doi:10.3390/MEDICINA58111543

46. De Giglio A, Grandinetti V, Aprile M, Borrelli G, Campus A, Chiocchini AL, Busutti M, Vischini G, **Di Federico A**, et al. Patterns of renal toxicity from the combination of pemetrexed and pembrolizumab for advanced nonsquamous non-small-cell lung cancer (NSCLC): a single-center experience. *Lung Cancer*. 2022;0(0). doi:10.1016/J.LUNGCAN.2022.10.007

47. **Di Federico A**⁺, De Giglio A, Gelsomino F, Sperandi F, Melotti B, Ardizzoni A. Predictors of Survival to Immunotherapy and Chemoimmunotherapy in Non-Small Cell Lung Cancer: A Meta-Analysis. *J Natl Cancer Inst*. 2022 Nov 2:djac205. doi: 10.1093/jnci/djac205. Epub ahead of print. PMID: 36322815.

48. Andrini E*, **Di Federico A***, et al. Immune checkpoint inhibitors in lung tumors with rare histologies and other thoracic malignancies. *Immunotherapy*. 2022 Nov 16. doi: 10.2217/imt-2022-0060. Epub ahead of print. PMID: 36382476.

49. De Giglio A, Tassinari E, Zappi A, **Di Federico A**, et al. The Palliative Prognostic (PaP) Score without Clinical Evaluation Predicts Early Mortality among Advanced NSCLC Patients Treated with Immunotherapy. *Cancers*. 2022; 14(23):5845. <https://doi.org/10.3390/cancers14235845>
50. Scalera S, Ricciuti B, Mazzotta M, Calonaci N, Alessi JV, Cipriani L, Bon G, Messina B, Lamberti G, **Di Federico A**, et al. Clonal KEAP1 mutations with loss of heterozygosity share reduced immunotherapy efficacy and low immune cell infiltration in lung adenocarcinoma. *Ann Oncol*. 2022 Dec 13:S0923-7534(22)04770-6. doi: 10.1016/j.annonc.2022.12.002. Epub ahead of print. PMID: 36526124.
51. Nigro MC, Marchese PV, Deiana C, Casadio C, Galvani L, **Di Federico A**, De Giglio A. Clinical Utility and Application of Liquid Biopsy Genotyping in Lung Cancer: A Comprehensive Review. *Lung Cancer (Auckl)*. 2023 Feb 3;14:11-25. doi: 10.2147/LCTT.S388047. PMID: 36762267; PMCID: PMC9904307.
52. Alessi JV, Elkrief A, Ricciuti B, Wang X, Cortellini A, Vaz VR, Lamberti G, Frias RL, Venkatraman D, Fulgenzi CAM, Pecci F, Recondo G, **Di Federico A**, et al. Clinicopathologic and genomic factors impacting efficacy of first-line chemoimmunotherapy in advanced non-small cell lung cancer (NSCLC). *Journal of Thoracic Oncology*, 0(0). <https://doi.org/10.1016/J.JTHO.2023.01.091>
53. Rossi S, Gelsomino F, Rinaldi R, Muccioli L, Comito F, **Di Federico A**, et al. Peripheral nervous system adverse events associated with immune checkpoint inhibitors. *J Neurol*. 2023 Feb 17. doi: 10.1007/s00415-023-11625-1. PMID: 36800019.
54. Ricciuti B, Elkrief A, Alessi J, Wang X, Li Y, Gupta H, Muldoon DM, Bertram AA, Pecci F, Lamberti G, **Di Federico A**, et al. Clinicopathologic, genomic, and immunophenotypic landscape of ATM mutations in non-small cell lung cancer. *Clin Cancer Res*. 2023 Apr 25:CCR-22-3413. doi: 10.1158/1078-0432.CCR-22-3413. PMID: 37097610.
55. Palloni A, Bisello S, Maggio I, Massucci M, Galuppi A, **Di Federico A**, et al. The Potential Role of Adjuvant Chemoradiotherapy in Patients with Microscopically Positive (R1) Surgical Margins after Resection of Cholangiocarcinoma. *Current Oncology*. 2023; 30(5):4754-4766. <https://doi.org/10.3390/curroncol30050358>
56. **Di Federico A**, De Giglio A, Sperandi F, Melotti B, Ardizzoni A, Gelsomino F. Effective retreatment with osimertinib in CNS-relapsed epidermal growth factor receptor-mutant non-small cell lung cancer patient following resection and adjuvant osimertinib. *Anticancer Drugs*. 2023 Apr 14. doi: 10.1097/CAD.0000000000001521. PMID: 37227039.
57. Alessi JV, Wang X, Elkrief A, Ricciuti B, Li YY, Gupta H, Spurr LF, Rizvi H, Luo J, Pecci F, Lamberti G, Recondo G, Venkatraman D, **Di Federico A**, et al. Impact of aneuploidy and chromosome 9p loss on tumor immune microenvironment and immune checkpoint inhibitor efficacy in non-small cell lung cancer. *J Thorac Oncol*. 2023 May 27:S1556-0864(23)00578-6. doi: 10.1016/j.jtho.2023.05.019. PMID: 37247843.

58. Mosca M, Conci N, **Di Federico A**⁺, et al. First-Generation Epidermal Growth Factor Receptor Inhibitors Plus Antiangiogenic Drugs Versus Third-Generation Epidermal Growth Factor Receptor Inhibitors in Advanced Non-Small-Cell Lung Cancer: A Meta-Analysis. *JCO Precis Oncol*. 2023 May;7:e2300073. doi: 10.1200/PO.23.00073. PMID: 37262392.
59. **Di Federico A**, et al. Resistance to KRAS G12C Inhibition in Non-small Cell Lung Cancer. *Curr Oncol Rep*. 2023 Jun 28. doi: 10.1007/s11912-023-01436-y. Epub ahead of print. PMID: 37378881.
60. Thummalapalli R, Ricciuti B, Bandlamudi C, Muldoon D, Rizvi H, Elkrief A, Luo J, Alessi JV, Pecci F, Lamberti G, **Di Federico A**, et al. Clinical and molecular features of long-term response to immune checkpoint inhibitors in patients with advanced non-small cell lung cancer. *Clin Cancer Res*. 2023 Jul 11:CCR-23-1207. doi: 10.1158/1078-0432.CCR-23-1207. Epub ahead of print. PMID: 37432985.
61. Alessi JV, Ricciuti B, Wang X, Pecci F, **Di Federico A**, et al. Impact of TMB/PD-L1 expression and pneumonitis on chemoradiation and durvalumab response in stage III NSCLC. *Nat Commun* 14, 4238 (2023). <https://doi.org/10.1038/s41467-023-39874-8>
62. Elkrief A, Alessi JMV, Ricciuti B, Brown S, Rizvi H, Preeshagul IR, Wang X, Pecci F, **Di Federico A**, et al. Efficacy of PD-(L)1 blockade monotherapy compared with PD-(L)1 blockade plus chemotherapy in first-line PD-L1-positive advanced lung adenocarcinomas: a cohort study *Journal for ImmunoTherapy of Cancer* 2023;11:e006994. doi: 10.1136/jitc-2023-006994
63. Gandhi MM, Ricciuti B, Harada G, Repetto M, Gildenberg MS, Singh A, Li YY, Gagné A, Wang X, Aizer A, Fitzgerald K, Nishino M, Alessi J, Pecci F, **Di Federico A**, et al. Amplification of Wild-Type RET Represents a Novel Molecular Subtype of Several Cancer Types With Clinical Response to Selpercatinib. *JCO Precision Oncology* 2023 :7
64. Alessi JV, Price A, Richards AL, Ricciuti B, Wang X, Elkrief A, Pecci F, **Di Federico A**, et al. Multi-institutional analysis of aneuploidy and outcomes to chemoradiation and durvalumab in stage III non-small cell lung cancer *Journal for ImmunoTherapy of Cancer* 2023;11:e007618. doi: 10.1136/jitc-2023-007618
65. Mosca M, Nigro MC, Pagani R, De Giglio A, **Di Federico A**. Neutrophil-to-Lymphocyte Ratio (NLR) in NSCLC, Gastrointestinal, and Other Solid Tumors: Immunotherapy and Beyond. *Biomolecules*. 2023 Dec 18;13(12):1803. doi: 10.3390/biom13121803. PMID: 38136673.
66. Pecci F, Ricciuti B, Alessi JV, De Giglio A, **Di Federico A**. Improving patient selection through tumor genomic recharacterization to overcome resistance to targeted therapy: commentary on the final analysis of the INSIGHT trial. *AME Clinical Trials Review*, 1. 2023. doi:10.21037/actr-23-29

67. De Giglio A, **Di Federico A**⁺, Pecci F, Ricciuti B. The importance of long-term safety, tolerability, and health-related quality of life: lessons from the ADAURA trial. *AME Clinical Trials Review*, 1. 2023. doi:10.21037/actr-23-15
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Conference abstracts

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2. Rizzo A, Ricci A, Tavolari S, Felicani C, Palloni A, Frega G, De Lorenzo S, Deserti M, Vasuri F, Nigro MC, Abbati F, **Di Federico A**, et al. P-23 Microwave ablation versus radiofrequency ablation in BCLC-A hepatocellular carcinoma: A systematic review and meta-analysis of randomized controlled trials. *Ann Oncol*. Published online 2020. doi:10.1016/j.annonc.2020.04.105
3. **Di Federico A**, et al. P79.07 Comparative Efficacy and Safety of PD-(L)1 Inhibitors Combined with 1st-Line Chemotherapy for Advanced NSCLC: A Meta-Analysis. *Journal of Thoracic Oncology*. Volume 16 Issue 3 Pages S648-S649 (March 2021). DOI: 10.1016/j.jtho.2021.01.1186
4. **Di Federico A**, et al. 113P Comparative efficacy and safety of PD-1/PD-L1 inhibitor monotherapy or in addition to chemotherapy for advanced, PD-L1 high non-small cell lung cancer (NSCLC): A meta-analysis of randomized trials. *Journal of Thoracic Oncology*, Volume 16, Issue 4, S759
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11. Ricciuti B, Lamberti G, Puchala S, Mahadevan N, Alessi J, Wang X, Li Y, Pecci F, **Di Federico A**, et al; Abstract 6629: Genomic and immunophenotypic landscape of acquired resistance to PD-(L)1 blockade in non-small cell lung cancer. *Cancer Res* 1 April 2023; 83 (7_Supplement): 6629. <https://doi.org/10.1158/1538-7445.AM2023-6629>

12. Gandhi M, Ricciuti B, Gildenberg M, Singh A, Li Y, Gagné A, Wang X, Fitzgerald K, Aizer A, Nishino M, Alessi JV, Pecci F, **Di Federico A**, et al. Amplification of wild-type RET and clinical response to selpercatinib for non-small-cell lung cancer (NSCLC). *Journal of Clinical Oncology* 2023 41:16_suppl, 9123-9123

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18. Makarem M, Ricciuti B, Alessi JV, Wang X, Pecci F, **Di Federico A**, et al. 2198P Clinicopathologic characteristics and outcomes to immune checkpoint inhibitor therapy in patients with HER2-altered metastatic non-small cell lung cancer. *Annals of Oncology*, Volume 34, S1136
19. **Di Federico A**, et al. 192 Clinicopathologic, genomic and immunophenotypic features and outcomes to immune checkpoint inhibitors in patients with mucinous lung adenocarcinoma *Journal for ImmunoTherapy of Cancer* 2023;11:doi: 10.1136/jitc-2023-SITC2023.0192
20. Alessi JV, Lindsay J, Lotter W, Giobbie-Hurder A, Sharma B, Pfaff K, Manos M, Welsh EL, Felt KD, Jones SM, Turner M, Adib E, Weirather J, Altreuter JO, Dryg I, **Di Federico A**, et al. 218 Prospective spatial immune cell profiling identifies features of the tumor-immune microenvironment associated with genomic alterations and patient survival in a 2,023 patient pan-cancer cohort *Journal for ImmunoTherapy of Cancer* 2023;11:doi: 10.1136/jitc-2023-SITC2023.0218
21. Auclin E, Du Rusquec P, Albarran V, Aboubakar F, Gerber H, Epailard N, Recondo G, De Giglio A, Berthou H, Fabre E, Laguna JC, Blaquier JB, Jimenez-Munarriz B, Tagliamento M, **Di Federico A**, et al. P2.09-29 Efficacy of Osimertinib (OSI) vs 1st-Generation TKI Followed by OSI by Clinical Profile in EGFR-Mutant NSCLC (SMILE STUDY). *Journal of Thoracic Oncology*, Volume 18, Issue 11, S344
22. Pecci F, Thummalapalli R, Alden S, Ricciuti B, Alessi JV, Elkrief A, Rizvi H, Wang X, Egger JV, Vaz VR, Barrichello A, Lamberti G, **Di Federico A**, et al. P2.07-03 Factors Associated with Disease Progression after Discontinuation of Immunotherapy for Immune-Related Toxicity in Non-small Cell Lung Cancer. *Journal of Thoracic Oncology*, Volume 18, Issue 11, S323 - S324
23. Ricciuti B, Elkrief A, Lin J, Altan M, Alessi JV, Gandhi M, Pecci F, Lamberti G, **Di Federico A**, et al. OA14.04 Three-Year Outcomes with First-Line Pembrolizumab, in Patients with Non-Small-Cell Lung Cancer and A PD-L1 Tumor Proportion Score >90%. *Journal of Thoracic Oncology*, Volume 18, Issue 11, S77
24. Nakazawa S, Pecci F, Ricciuti B, Harada G, Lee JK, Alessi JV, Barrichello APC, Vaz VR, Lamberti G, **Di Federico A**, et al. OA19.05 Activating MET Tyrosine Kinase Domain Mutations as de Novo Oncogenic Drivers in Non-small Cell Lung Cancer. *Journal of Thoracic Oncology*, Volume 18, Issue 11, S88 - S89

25. **Di Federico A.** et al. MA20.06 Association of TTF-1 Expression with Outcomes to Immunotherapy and KRAS G12C Inhibition in Lung Adenocarcinoma. Journal of Thoracic Oncology, Volume 18, Issue 11, S175

Speaker activity

- RAS Searchlight Network quarter meetings.
- IASLC World Conference on Lung Cancer 2023, Singapore. Mini oral presentation of the study titled: “Association of TTF-1 expression with outcomes to immunotherapy and KRAS G12C inhibition in lung adenocarcinoma”.

Awards

- 2023 International Association for the Study of Lung Cancer (IASLC) Academy
- IASLC 2023 Targeted Therapies of Lung Cancer Meeting Education Award
- Premio Fondazione F. Calabresi Onlus per il convegno “Grandangolo 2023”

Signature:

Handwritten signature of Alessandro Di Federico in black ink.