

Biomarkers in Non-Small-Cell Lung Cancer (NSCLC)

| Resource | Address |
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| Bai R, Lv Z, Xu D, Cui J. Predictive biomarkers for cancer immunotherapy with immune checkpoint inhibitors. <i>Biomark Res.</i> 2020;8:34. | https://biomarkerres.biomedcentral.com/articles/10.1186/s40364-020-00209-0 |
| Fois SS, Paliogiannis P, Zinelli A, Fois AG, Cossu A, Palmieri G. Molecular epidemiology of the main druggable genetic alterations in non-small cell lung cancer. <i>Int J Mol Sci.</i> 2021;22:612. | https://www.mdpi.com/1422-0067/22/2/612 |
| Humphries MP, Bingham V, Sidi FA, et al. Improving the diagnostic accuracy of the PD-L1 test with image analysis and multiplex hybridization. <i>Cancers (Basel).</i> 2020;12:1114. | https://www.mdpi.com/2072-6694/12/5/1114 |
| Lamberti G, Andolini E, Sisi M, et al. Beyond EGFR, ALK and ROS1: Current evidence and future perspectives on newly targetable oncogenic drivers in lung adenocarcinoma. <i>Crit Rev Oncol Hematol.</i> 2020;156:103119. | https://www.sciencedirect.com/science/article/abs/pii/S1040842820302559 |

Single-Agent Frontline Immunotherapy for NSCLC without Targetable Mutations

| Resource | Address |
|--|---|
| Bai R, Lv Z, Xu D, Cui J. Predictive biomarkers for cancer immunotherapy with immune checkpoint inhibitors. <i>Biomark Res.</i> 2020;8:34. | https://biomarkerres.biomedcentral.com/articles/10.1186/s40364-020-00209-0 |
| Fois SS, Paliogiannis P, Zinelli A, Fois AG, Cossu A, Palmieri G. Molecular epidemiology of the main druggable genetic alterations in non-small cell lung cancer. <i>Int J Mol Sci.</i> 2021;22:612. | https://www.mdpi.com/1422-0067/22/2/612 |
| Humphries MP, Bingham V, Sidi FA, et al. Improving the diagnostic accuracy of the PD-L1 test with image analysis and multiplex hybridization. <i>Cancers (Basel).</i> 2020;12:1114. | https://www.mdpi.com/2072-6694/12/5/1114 |
| Lamberti G, Andolini E, Sisi M, et al. Beyond EGFR, ALK and ROS1: Current evidence and future perspectives on newly targetable oncogenic drivers in lung adenocarcinoma. <i>Crit Rev Oncol Hematol.</i> 2020;156:103119. | https://www.sciencedirect.com/science/article/abs/pii/S1040842820302559 |
| Bai R, Lv Z, Xu D, Cui J. Predictive biomarkers for cancer immunotherapy with immune checkpoint inhibitors. <i>Biomark Res.</i> 2020;8:34. | https://biomarkerres.biomedcentral.com/articles/10.1186/s40364-020-00209-0 |
| Fois SS, Paliogiannis P, Zinelli A, Fois AG, Cossu A, Palmieri G. Molecular epidemiology of the main druggable genetic alterations in non-small cell lung cancer. <i>Int J Mol Sci.</i> 2021;22:612. | https://www.mdpi.com/1422-0067/22/2/612 |

First-line Immunotherapy Plus Chemotherapy Combinations for NSCLC without Targetable Mutations

| Resource | Address |
|--|---|
| Gadgeel S, Rodriguez-Abreu D, Speranza G, et al. Updated analysis from KEYNOTE-189: Pembrolizumab or placebo plus pemetrexed and platinum for previously untreated metastatic nonsquamous non-small-cell lung cancer. <i>J Clin Oncol.</i> 2020;38:1505-1517. | https://ascopubs.org/doi/full/10.1200/JCO.19.03136 |
| Gogishvili M, Melkadze T, Makharadze T, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: A randomized, controlled, double-blind phase 3 trial. <i>Nat Med.</i> 2022;28:2374-2380. | https://www.nature.com/articles/s41591-022-01977-y |
| Gogishvili M, Melkadze T, Makharadze T, et al. LBA51 EMPOWER-Lung 3: Cemiplimab in combination with platinum doublet chemotherapy for first-line (1L) treatment of advanced non-small cell lung cancer (NSCLC). <i>Ann Oncol.</i> 2021;32(suppl 5):S1328. | https://www.annalsofoncology.org/article/S0923-7534(21)04434-3/fulltext |
| Paz-Ares L, Vicente D, Tafreshi A, et al. A randomized, placebo-controlled trial of pembrolizumab plus chemotherapy in patients with metastatic squamous NSCLC: Protocol-specified final analysis of KEYNOTE-407. <i>J Thoracic Oncol.</i> 2020;15:1657-1669. | https://www.jto.org/article/S1556-0864(20)30500-1/fulltext |
| Reck M, Mok T, Socinski MA, et al. 1293P - IMpower150: Updated efficacy analysis in patients with EGFR mutations <i>Ann Oncol.</i> 2020;31(suppl 4) S837-S838. | https://www.annalsofoncology.org/article/S0923-7534(20)41603-5/fulltext |
| Testing the Timing of Pembrolizumab Alone or With Chemotherapy as First Line Treatment and Maintenance in Non-small Cell Lung Cancer. ClinicalTrials.gov identifier: NCT03793179. Updated June 29, 2023. | https://classic.clinicaltrials.gov/ct2/show/NCT03793179 |
| West H, McCleod M, Hussein M, et al. Atezolizumab in combination with carboplatin plus nab-paclitaxel chemotherapy compared with chemotherapy alone as first-line treatment for metastatic non-squamous non-small-cell lung cancer (IMpower130): A multicentre, randomised, open-label, phase 3 trial. <i>Lancet Oncol.</i> 2019;20:924-937. | https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(19)30167-6/fulltext |

First-line Immunotherapy Combinations for NSCLC without Targetable Mutations

| Resource | Address |
|--|---|
| Goto Y, Su WC, Levy BP, et al. TROPION-Lung02: Datopotamab deruxtecan (Dato-DXd) plus pembrolizumab (pembro) with or without platinum chemotherapy (Pt-CT) in advanced non-small cell lung cancer (aNSCLC). <i>J Clin Oncol.</i> 2023;41(16 suppl):9004. | https://ascopubs.org/doi/abs/10.1200/JCO.2023.41.16_suppl.9004 |
| Hellmann MD, Paz-Ares L, Caro RB, et al. Nivolumab plus ipilimumab in advanced non-small-cell lung cancer. <i>N Engl J Med.</i> 2019;381:2020-2031. | https://www.nejm.org/doi/full/10.1056/nejmoa1910231 |

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| Johnson ML, Cho BC, Luft A, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: The phase III POSEIDON study. <i>J Clin Oncol.</i> 2023;41:1213-1227. | https://ascopubs.org/doi/10.1200/JCO.22.00975 |
| Paz-Ares LG, Ciuleanu T-E, Cobo M, et al. First-line nivolumab plus ipilimumab with chemotherapy versus chemotherapy alone for metastatic NSCLC in CheckMate 9LA: 3-year clinical update and outcomes in patients with brain metastases or select somatic mutations. <i>J Thorac Oncol.</i> 2023;18:204-222. | https://www.jto.org/article/S1556-0864(22)01864-0/fulltext |
| Paz-Ares LG, Ciuleanu TE, Cobo-Dols M, et al. First-line (1L) nivolumab (NIVO) + ipilimumab (IPI) + 2 cycles of chemotherapy (chemo) versus chemo alone (4 cycles) in patients (pts) with metastatic non–small cell lung cancer (NSCLC): 3-year update from CheckMate 9LA. <i>J Clin Oncol.</i> 2022;40(suppl 17):LBA9026. | https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.17_suppl.LBA9026 |
| Rizvi NA, Cho BC, Reinmuth N, et al. Durvalumab with or without tremelimumab vs standard chemotherapy in first-line treatment of metastatic non-small cell lung cancer: The MYSTIC phase 3 randomized clinical trial. <i>JAMA Oncol.</i> 2020;6:661-674. | https://jamanetwork.com/journals/jamaoncology/fullarticle/2763864 |

Choosing the Optimal Therapy in NSCLC without Targetable Mutations

| Resource | Address |
|---|---|
| Aguilar EJ, Ricciuti B, Gainor JF, et al. Outcomes to first-line pembrolizumab in patients with non-small-cell lung cancer and very high PD-L1 expression. <i>Ann Oncol.</i> 2019;30:1653-1659. | https://www.annalsofoncology.org/article/S0923-7534(19)60984-1/fulltext |
| Grant MJ, Herbst RS, Goldberg SB. Selecting the optimal immunotherapy regimen in driver-negative metastatic NSCLC. <i>Nat Rev Clin Oncol.</i> 2021;18:625-644. | https://www.nature.com/articles/s41571-021-00520-1 |
| National Comprehensive Cancer Network®. NCCN Clinical Practice Guidelines in Oncology. Non-Small Cell Lung Cancer. Version 3.2023. | https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf |

Immune-related Adverse Events

| Resource | Address |
|--|---|
| Brahmer JR, Lacchetti C, Schneider BJ, et al. Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: American Society of Clinical Oncology Clinical Practice Guideline. <i>J Clin Oncol.</i> 2018;36:1714-1768. | https://ascopubs.org/doi/10.1200/JCO.2017.77.6385 |
| Grant MJ, Herbst RS, Goldberg SB. Selecting the optimal immunotherapy regimen in driver-negative metastatic NSCLC. <i>Nat Rev Clin Oncol.</i> 2021;18:625-644. | https://www.nature.com/articles/s41571-021-00520-1 |

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| Jamal S, Hudson M, Fifi-Mah A, Ye C. Immune-related adverse events associated with cancer immunotherapy: A review for the practicing rheumatologist. <i>J Rheumatol.</i> 2020;47:166-175. | https://www.jrheum.org/content/47/2/166.long |
| Remon J, Mezquita L, Corral J, et al. Immune-related adverse events with immune checkpoint inhibitors in thoracic malignancies: Focusing on non-small cell lung cancer patients. <i>J Thorac Dis.</i> 2018;10(suppl 13):S1516-S1533. | https://jtd.amegroups.com/article/view/18243/16427 |

All URLs accessed July 11, 2023