Tecentriq® (atezolizumab)
(Intravenous)

-E-

Document Number: OHSU HEALTHSERVICES-0388

Date Reviewed: 07/2025

Date of Origin: 08/05/2019

Dates Approved: 08/2019, 10/2019, 01/2020, 04/2020, 07/2020, 09/2020, 01/2021, 04/2021, 06/2021, 10/2021, 12/2021, 02/2022, 04/2022, 07/2022, 10/2022, 01/2023, 04/2023, 07/2023, 10/2023, 01/2024, 04/2024, 08/2024, 11/2024, 01/2025, 02/04/25, 05/05/2025, 06/24/2025, 08/05/2025

I. Length of Authorization Δ [1,23]

- Initial: Prior authorization validity will be provided initially for 6 months.
- Renewal: Prior authorization validity may be renewed every 6 months thereafter (unless otherwise specified).
  - Adjuvant therapy in Non-Small Cell Lung Cancer (NSCLC) can be renewed up to a maximum of 12 months of therapy.*

Note: The maximum number of doses is dependent on the dosing frequency and duration of therapy. Refer to Section V for exact dosage.		
Dosing Frequency	**Maximum length of therapy**	**Maximum number of doses**
2 weeks	1 year	26 doses
3 weeks	1 year	18 doses
4 weeks	1 year	13 doses

II. Dosing Limits

Max Units (per dose and over time) [HCPCS Unit]:

- Mesotheliomas (*peritoneal, pericardial, & tunica vaginalis*): 120 billable units every 21 days
- All other indications: 504 billable units every 84 days

III. Initial Approval Criteria[1]

Coverage is provided in the following conditions:

- Patient is at least 18 years of age (unless otherwise specified); **AND**

Universal Criteria

- Patient has not received previous therapy with a programmed death (PD-1/PD-L1)-directed therapy unless otherwise specified [Δ] *(Note: Not applicable when used as switch-therapy with subcutaneous atezolizumab)*; **AND**
- Therapy will not be used concomitantly with subcutaneous atezolizumab; **AND**

Non-Small Cell Lung Cancer (NSCLC) † ‡ [1,5,6,8,11,12,17,23,9e-11e,14e]

- Used for recurrent, advanced, or metastatic disease (excluding locoregional recurrence or symptomatic local disease without evidence of disseminated disease) or mediastinal lymph node recurrence with prior radiation therapy; **AND**
  - Used as first-line therapy; **AND**
    - Used as a single agent; **AND**
      - Patients with performance status (PS) 0-2 who have tumors that are negative for actionable molecular markers* (may be KRAS G12C mutation positive) and PD-L1 ≥50% *(PD-L1 stained ≥ 50% of tumor cells [TC ≥ 50%] or PD-L1 stained tumor-infiltrating immune cells [IC] covering ≥ 10% of the tumor area [IC ≥ 10%])*, as determined by an FDA-approved test or CLIA-compliant test❖; **AND**

        – Use of atezolizumab will be restricted to patients with a contraindication or intolerance to single-agent cemiplimab; **OR**

      - Patients with PS 3 who have tumors that are negative for actionable molecular biomarkers* (may be KRAS G12C mutation positive) regardless of PD-L1 status; **AND**

        – Patient is platinum-ineligible; **OR**

      - Patients with PS 3 who have tumors positive for one of the following molecular biomarkers: EGFR exon 20, BRAF V600E, NTRK1/2/3 gene fusion, MET exon-14 skipping, ERBB2 (HER2), NRG1 gene fusion; **AND**

        – Patient is platinum-ineligible; **OR**

    - Used in combination with one of the following:

      – Carboplatin, paclitaxel, and bevacizumab

      – Carboplatin and albumin-bound paclitaxel; **AND**

      - Used for non-squamous disease; **AND**

        – Tumor is negative for actionable molecular markers* (may be KRAS G12C mutation positive); **OR**

        – Tumor is positive for one of the following molecular biomarkers: EGFR exon 20, BRAF V600E, NTRK1/2/3 gene fusion, MET exon-14 skipping, ERBB2 (HER2), or NRG1 gene; **AND**

- Use of atezolizumab will be restricted to patients with a contraindication or intolerance to cemiplimab/(paclitaxel or pemetrexed)/(carboplatin or cisplatin); **OR**

  - Used as subsequent therapy; **AND**
    - Used as a single agent; **AND**
      - Patients with PS 0-2; **OR**
      - Patients with PS 3 who are positive for one of the following molecular biomarkers: BRAF V600E, NTRK1/2/3 gene fusion or MET exon-14 skipping; **AND**
        - Patient is platinum-ineligible; **OR**
      - Patients with PS 3 who are positive for one of the following molecular biomarkers and received prior targeted therapy§: EGFR exon 19 deletion or exon 21 L858R, EGFR S768I, L861Q and/or G719X, RET rearrangement, ALK rearrangement, or ROS1 rearrangement; **AND**
        - Patient is platinum-ineligible; **OR**
    - Used in combination with one of the following:
      - Carboplatin, paclitaxel, and bevacizumab
      - Carboplatin and albumin-bound paclitaxel; **AND**
      - Used for non-squamous disease; **AND**
        - Patient is positive for one of the following molecular biomarkers: BRAF V600E, NTRK1/2/3 gene fusion or MET exon-14 skipping; **OR**
        - Patient is positive for one of the following molecular biomarkers and received prior targeted therapy**§**: EGFR S768I, L861Q, and/or G719X mutation; **AND**

- Use of atezolizumab will be restricted to patients with a contraindication or intolerance to cemiplimab/(paclitaxel or pemetrexed)/(carboplatin or cisplatin); **OR**

  - Used as continuation maintenance therapy in patients who have achieved a tumor response or stable disease following initial therapy; **AND**
    - Used in combination with bevacizumab following a first-line regimen with atezolizumab, carboplatin, paclitaxel, and bevacizumab for non-squamous histology; **OR**
    - Used as a single agent following a first-line regimen with atezolizumab, carboplatin, and albumin-bound paclitaxel for non-squamous histology; **OR**
    - Used as a single agent following a first-line regimen with single agent atezolizumab; **OR**

- Used as adjuvant therapy as a single agent; **AND**
  - Tumor expresses PD-L1 ≥1% as determined by an FDA-approved test or CLIA-compliant test❖; **AND**

- Used following resection and previous adjuvant platinum-based chemotherapy; **AND**
  - Patient has stage II to IIIA disease **†; OR**
  - Patient has stage IB disease **‡**; **AND**
    - Disease is negative for EGFR exon 19 deletion or exon 21 L858R mutations, or ALK rearrangements

- **Note: Actionable molecular genomic biomarkers include EGFR, KRAS, ALK, ROS1, BRAF, NTRK1/2/3, MET, RET, NRG1, and ERBB2 (HER2). Complete genotyping for EGFR, KRAS, ALK, ROS1, BRAF, NTRK1/2/3, MET, RET, NRG1, and ERBB2 (HER2), via biopsy and/or plasma testing. If a clinically actionable marker is found, it is reasonable to start therapy based on the identified marker. Treatment is guided by available results and, if unknown, these patients are treated as though they do not have driver oncogenes.*

- ***§** Note: Genomic Aberration/Mutational Driver Targeted Therapies: Refer to guidelines for appropriate use.*

Small Cell Lung Cancer (SCLC) † ‡ Φ [1,6,14,18]

- Patient has extensive stage disease (ES-SCLC); **AND**
  - Used as first-line therapy in combination with etoposide and carboplatin; **OR**
  - Used as single-agent maintenance therapy after initial therapy with atezolizumab, etoposide, and carboplatin

Hepatocellular Carcinoma (HCC) † ‡ Φ [1,6,15,16,21,30e]

- Used in combination with bevacizumab; **AND**
- Patient does not have Child-Turcotte-Pugh (CTP) Class C liver disease; **AND**
  - Used as first-line therapy; **AND**
    - Use of atezolizumab will be restricted to patients with a contraindication or intolerance to durvalumab in combination with tremelimumab-actl; **AND**
      - Patient has unresectable disease **†**; **OR**
      - Patient has extrahepatic/metastatic disease and is deemed ineligible for resection, transplant, or locoregional therapy; **OR**
  - Used as subsequent-line therapy for disease progression on or after systemic therapy; **AND**
    - Patient received previous treatment with sorafenib or lenvatinib

Peritoneal** Mesothelioma (PeM) ‡ [6,24,27,22e]

- Used as subsequent therapy in combination with bevacizumab; **AND**
- Patient previously received treatment with platinum and pemetrexed, unless contraindicated

*** Note: May also be used for pericardial mesothelioma and tunica vaginalis testis mesothelioma.*

Cutaneous Melanoma † ‡ Φ [1,6,19,20,29]

- Patient has BRAF V600 mutation positive disease as detected by an FDA approved or CLIA compliant test❖; **AND**

- Used in combination with cobimetinib and vemurafenib; **AND**
- Patient has unresectable or metastatic disease; **AND**
- Used as first-line therapy

Alveolar Soft Part Sarcoma (ASPS) † ‡ Φ [1,6,26]

- Patient is at least 2 years of age; **AND**
- Used as a single agent; **AND**
- Patient has unresectable or metastatic disease that is not curable by surgery

Cervical Cancer ‡ [6,14,37]

- Patient has small cell neuroendocrine carcinoma of the cervix (NECC); **AND**
  - Used as first-line therapy for persistent, recurrent, or metastatic disease; **AND**
    - Used in combination with etoposide AND either cisplatin or carboplatin; **OR**
  - Used as single-agent maintenance therapy after initial therapy with atezolizumab, etoposide, AND either carboplatin or cisplatin; **OR**
- Patient has adenocarcinoma, adenosquamous, or squamous cell carcinoma; **AND**
  - Used as first-line therapy; **AND**
    - Patient has recurrent or metastatic disease; **AND**
    - Used in combination with bevacizumab, paclitaxel, AND either cisplatin or carboplatin; **OR**
  - Used in combination with bevacizumab as maintenance therapy after initial therapy with atezolizumab, bevacizumab, paclitaxel, AND cisplatin or carboplatin

Preferred therapies and recommendations are determined by review of clinical evidence. NCCN category of recommendation is taken into account as a component of this review. Regimens deemed equally efficacious (i.e., those having the same NCCN categorization) are considered to be therapeutically equivalent.

Enhanced Oncology Value (EOV) Program – Redacted indications
Uses not listed above have inadequate data to support efficacy and are excluded from coverage. Other treatment options including, but are not limited to, the following may be appropriate: radiation therapy, surgery, traditional chemotherapy (e.g., platinum, taxane), compassionate use/expanded access programs, clinical trials, supportive care, integrative and complementary therapies.

❖*If confirmed using an FDA approved assay – http://www.fda.gov/companiondiagnostics*

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria Δ 1,6,36

Coverage can be renewed based upon the following criteria:

- Patient continues to meet the universal and other indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section III; **AND**
- Duration of authorization has not been exceeded *(refer to Section I);* **AND**
- Disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: immune-mediated adverse reactions (e.g., pneumonitis, hepatitis, colitis, endocrinopathies, nephritis/renal dysfunction, rash/dermatitis [including Stevens-Johnson syndrome (SJS), drug rash with eosinophilia and systemic symptoms (DRESS), and toxic epidermal necrolysis (TEN)], myocarditis, pericarditis, vasculitis, solid organ transplant rejection, etc.), severe infusion-related reactions, complications of allogeneic hematopoietic stem cell transplantation (HSCT), etc.

Δ Notes:
- Patients responding to therapy who relapse ≥ 6 months after discontinuation due to duration) are eligible to re-initiate PD-directed therapy.
- Patients previously presenting with aggressive disease who are exhibiting stable disease on treatment as their best response (or if therapy improved performance status) may be eligible for continued therapy without interruption or discontinuation.
- Patients who complete adjuvant therapy and progress ≥ 6 months after discontinuation are eligible to re-initiate PD-directed therapy for metastatic disease.
- Patients whose tumors, upon re-biopsy, demonstrate a change in actionable mutation (e.g., MSS initial biopsy; MSI-H subsequent biopsy) may be eligible to re-initiate PD-directed therapy and will be evaluated on a case-by-case basis.

V. Dosage/Administration Δ 1,14,27,28,37

Indication	Dose
NSCLC, SCLC, Cervical Cancer	Administer intravenously until disease progression or unacceptable toxicity*: – 840 mg every 2 weeks or – 1200 mg every 3 weeks or – 1680 mg every 4 weeks **NSCLC adjuvant treatment may continue up to a maximum of 12 months in patients without recurrent disease or unacceptable toxicity.*

HCC	First-line therapy: – 840 mg every 2 weeks or – 1200 mg every 3 weeks or – 1680 mg every 4 weeks Administer intravenously until disease progression or unacceptable toxicity. Subsequent therapy: – 1200 mg every 3 weeks Administer intravenously until disease progression or unacceptable toxicity.
Cutaneous Melanoma	Administer intravenously until disease progression or unacceptable toxicity: – 840 mg every 2 weeks or – 1200 mg every 3 weeks or – 1680 mg every 4 weeks **Prior to initiating atezolizumab, patients should receive a 28 day treatment cycle of cobimetinib 60 mg orally once daily (21 days on and 7 days off) and vemurafenib 960 mg orally twice daily from Days 1-21 and vemurafenib 720 mg orally twice daily from Days 22-28.*
Mesotheliomas *(peritoneal, pericardial, and tunica vaginalis testis)*	Administer 1200 mg every 3 weeks intravenously until disease progression or unacceptable toxicity
ASPS	Administer intravenously until disease progression or unacceptable toxicity: Adult patients: – 840 mg every 2 weeks or – 1200 mg every 3 weeks or – 1680 mg every 4 weeks Pediatric patients at least 2 years of age: – 15 mg/kg (up to a maximum 1200 mg) every 3 weeks

Dosing should be calculated using actual body weight and not flat dosing (as applicable) based on the following: [30-35]

- 840 mg (15 mg/kg) in patients receiving therapy every 21 days who weigh ≤ 61 kg
- 1200 mg (20 mg/kg) in patient receiving therapy every 28 days who weigh ≤ 66 kg

Note: This information is not meant to replace clinical decision making when initiating or modifying medication therapy and should only be used as a guide. Patient-specific variables should be taken into account.

VI. Billing Code/Availability Information

HCPCS Code:

- J9022 – Injection, atezolizumab, 10 mg; 1 billable unit = 10 mg

NDC(s):

- Tecentriq 1200 mg/20 mL solution for injection single-dose vial: 50242-0917-xx
- Tecentriq 840 mg/14 mL solution for injection single-dose vial: 50242-0918-xx

VII. References (STANDARD)

1. Tecentriq [package insert]. South San Francisco, CA; Genentech, Inc; April 2024. Accessed July 2025.
2. Ventana Product Library, Roche Pharmaceuticals. VENTANA PD-L1 [SP142] Assay. https://diagnostics.roche.com/global/en/products/lab/pd-l1-sp142-assay-ventana-rtd001231.html#productInfo and product label https://www.accessdata.fda.gov/cdrh_docs/pdf16/P160006C.pdf. Accessed March 2025.
3. U.S. Food and Drug Administrations (FDA). Division of Drug Information. Health Alert. FDA Alerts Health Care Professionals and Oncology Clinical Investigators about an Efficacy Issue Identified in Clinical Trials for Some Patients Taking Keytruda (pembrolizumab) or Tecentriq (atezolizumab) as Monotherapy to Treat Urothelial Cancer with Low Expression of PD-L1 | FDA. Accessed March 2025.
4. Balar AV, Galsky MD, Rosenberg JE, et al. Atezolizumab as first-line therapy in cisplatin-ineligible patients with locally advanced and metastatic urothelial carcinoma: a single-arm, multicentre, phase 2 trial. Lancet. 2017 January 07; 389(10064): 67–76. doi:10.1016/S0140-6736(16)32455-2.
5. Socinski MA, Jotte RM, Cappuzzo F, et. al. Atezolizumab for First-Line Treatment of Metastatic Nonsquamous NSCLC. N Engl J Med 2018; 378:2288-2301. DOI: 10.1056/NEJMoa1716948.
6. Referenced with permission from the NCCN Drugs and Biologics Compendium (NCCN Compendium®) atezolizumab. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.
7. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Bladder Cancer. Version 1.2025. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.
8. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Non-Small Cell Lung Cancer. Version 7.2025. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are

trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.

9. Gupta S, Sonpavde G, Grivas P, et al. Defining “platinum-ineligible” patients with metastatic urothelial cancer (mUC). J Clin Oncol. 2019 Mar 1;37(7_suppl):451.
10. Rosenberg JE, Hoffman-Censits J, Powles T, et al. Atezolizumab in patients with locally advanced and metastatic urothelial carcinoma who have progressed following treatment with platinum-based chemotherapy: a single-arm, multicentre, phase 2 trial. Lancet. 2016 May 7;387(10031):1909-20. doi: 10.1016/S0140-6736(16)00561-4. Epub 2016 Mar 4.
11. 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. Lancet Oncol. 2019 Jul;20(7):924-937. doi: 10.1016/S1470-2045(19)30167-6. Epub 2019 May 20.
12. Rittmeyer A, Barlesi F, Waterkamp D, et al. Atezolizumab versus docetaxel in patients with previously treated non-small-cell lung cancer (OAK): a phase 3, open-label, multicentre randomised controlled trial. Lancet. 2017 Jan 21;389(10066):255-265. doi: 10.1016/S0140-6736(16)32517-X. Epub 2016 Dec 13.
13. Schmid P, Adams S, Rugo HS, et al. Atezolizumab and Nab-Paclitaxel in Advanced Triple-Negative Breast Cancer. N Engl J Med. 2018 Nov 29;379(22):2108-2121. doi: 10.1056/NEJMoa1809615. Epub 2018 Oct 20.
14. Horn L, Mansfield AS, Szczęsna A, et al. First-Line Atezolizumab plus Chemotherapy in Extensive-Stage Small-Cell Lung Cancer. N Engl J Med. 2018 Dec 6;379(23):2220-2229. doi: 10.1056/NEJMoa1809064. Epub 2018 Sep 25.
15. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Hepatocellular Carcinoma. Version 1.2025. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.
16. Pishvaian MJ, Lee MS, Ryoo B, et al. Updated safety and clinical activity results from a Phase Ib study of atezolizumab + bevacizumab in hepatocellular carcinoma (HCC). ESMO 2018 Congress. Munich, Germany; 2018.
17. De Marinis F, Jassem J, Spigel DR, et al. 480TiP IMpower110: Phase III study on 1L atezolizumab (atezo) in PD-L1–selected chemotherapy (chemo)-naive NSCLC patients (pts). Annals of Oncology. 2016 Dec 1;27(suppl_9).
18. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Small Cell Lung Cancer. Version 4.2025. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®.

NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.

19. Gutzmer R, Stroyakovskiy D, Gogas H, et al. Atezolizumab, vemurafenib, and cobimetinib as first-line treatment for unresectable advanced BRAFV600 mutation-positive melanoma (IMspire150): primary analysis of the randomised, double-blind, placebo-controlled, phase 3 trial. Lancet. 2020;395(10240):1835-1844. doi:10.1016/S0140-6736(20)30934-X.
20. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Melanoma: Cutaneous. Version 2.2025. National Comprehensive Cancer Network, 2025. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2025.
21. Finn RS, Qin S, Ikeda M, et al; IMbrave150 Investigators. Atezolizumab plus Bevacizumab in Unresectable Hepatocellular Carcinoma. N Engl J Med. 2020 May 14;382(20):1894-1905.
22. Bellmunt, J, Valderrama BP (2025). Treatment of metastatic urothelial cancer of the bladder and urinary tract. In Lerner SP, Shah S (Eds.), *UptoDate*. Last updated Jan 07, 2025. Accessed March 2025. Available from https://www.uptodate.com/contents/treatment-of-metastatic-urothelial-cancer-of-the-bladder-and-urinary-tract?search=cisplatin%20ineligible&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1.
23. Felip E, Altorki N, Zhou C, et al. Adjuvant atezolizumab after adjuvant chemotherapy in resected stage IB-IIIA non-small-cell lung cancer (IMpower010): a randomised, multicentre, open-label, phase 3 trial. Lancet. 2021 Oct 9;398(10308):1344-1357. doi: 10.1016/S0140-6736(21)02098-5. Epub 2021 Sep 20.
24. Raghav KPS, Overman MJ, Liu S, et al. A phase II trial of atezolizumab and bevacizumab in patients with relapsed/refractory and unresectable malignant peritoneal mesothelioma. Journal of Clinical Oncology 2020 38:15_suppl, 9013-9013.
25. De Santis M, Bellmunt J, Mead G, et al. Randomized phase II/III trial assessing gemcitabine/carboplatin and methotrexate/carboplatin/vinblastine in patients with advanced urothelial cancer "unfit" for cisplatin-based chemotherapy: phase II--results of EORTC study 30986. J Clin Oncol. 2009 Nov 20;27(33):5634-9. doi: 10.1200/JCO.2008.21.4924. Epub 2009 Sep 28.
26. Naqash AR, O'Sullivan Coyne GH, Moore N, et al. Phase II study of atezolizumab in advanced alveolar soft part sarcoma (ASPS). Journal of Clinical Oncology 2021 39:15_suppl, 11519-11519.
27. Raghav K, Liu S, Overman MJ, et al. Efficacy, Safety, and Biomarker Analysis of Combined PD-L1 (Atezolizumab) and VEGF (Bevacizumab) Blockade in Advanced Malignant Peritoneal Mesothelioma. Cancer Discov. 2021 Nov;11(11):2738-2747. doi: 10.1158/2159-8290.CD-21-0331.

28. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Atezolizumab + Bevacizumab: Hepatocellular Carcinoma Order Template, HEP32. National Comprehensive Cancer Network, 2025. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Guidelines, go online to NCCN.org. Accessed June 2025.
29. Ascierto PA, Stroyakovskiy D, Gogas H, et al. Overall survival with first-line atezolizumab in combination with vemurafenib and cobimetinib in BRAFV600 mutation-positive advanced melanoma (IMspire150): second interim analysis of a multicentre, randomised, phase 3 study. Lancet Oncol 2023;24:33-44.
30. Kicken, M.P., Deenen, M.J., Moes, D.J.A.R. *et al.* An Evidence-Based Rationale for Dose De-escalation of Subcutaneous Atezolizumab. *Targ Oncol* **19**, 779–787 (2024). https://doi.org/10.1007/s11523-024-01087-4.
31. Morrissey KM, Marchand M, Patel H, *et al*. Alternative dosing regimens for atezolizumab: an example of model-informed drug development in the postmarketing setting. Cancer Chemother Pharmacol. 2019 Dec;84(6):1257-1267. doi: 10.1007/s00280-019-03954-8. Epub 2019 Sep 21. PMID: 31542806; PMCID: PMC6820606.
32. Liu SN, Marchand M, Liu X, et al. Extension of the Alternative Intravenous Dosing Regimens of Atezolizumab into Combination Settings through Modeling and Simulation. The Journal of Clinical Pharmacology, 10.1002, 62,11, (1393-1402), Nov. 2022.
33. Cody J. Peer, Keith T. Schmidt, Oluwatobi Arisa, William J. Richardson, Koosha Paydary, Daniel A. Goldstein, James L. Gulley, William D. Figg, Mark J. Ratain, In Silico Re-Optimization of Atezolizumab Dosing Using Population Pharmacokinetic Simulation and Exposure–Response Simulation, The Journal of Clinical Pharmacology, 10.1002/jcph.2203, **63**, 6, (672-680), (2023).
34. Wesevich A, Goldstein DA, Paydary K, et al. Interventional pharmacoeconomics for immune checkpoint inhibitors through alternative dosing strategies. British Journal of Cancer. 2023 Oct;129(9):1389-1396. DOI: 10.1038/s41416-023-02367-y. PMID: 37542109; PMCID: PMC10628132.
35. Maritaz, C., Broutin, S., Chaput, N. *et al.* Immune checkpoint-targeted antibodies: a room for dose and schedule optimization?. *J Hematol Oncol* **15**, 6 (2022). https://doi.org/10.1186/s13045-021-01182-3
36. Oaknin A, Gladieff L, Martínez-García J, et al. ENGOT-Cx10–GEICO 68-C–JGOG1084–GOG-3030 Investigators. Atezolizumab plus bevacizumab and chemotherapy for metastatic, persistent, or recurrent cervical cancer (BEATcc): a randomised, open-label, phase 3 trial. Lancet 2024;403:31-43.

VIII. References (ENHANCED)

1e. Balar AV, Castellano D, O'Donnell PH, et al. Pembrolizumab as first-line therapy in cisplatin-ineligible advanced urothelial cancer: Results from the total KEYNOTE-052 study population. J Clin Oncol 2017 Feb;35(6_suppl):284.

2e. De Santis M, Bellmunt J, Mead G, et al. Randomized phase II/III trial assessing gemcitabine/carboplatin and methotrexate/carboplatin/vinblastine in patients with advanced urothelial cancer who are unfit for cisplatin-based chemotherapy: EORTC study 30986. J Clin Oncol. 2012;30(2):191–199. doi:10.1200/JCO.2011.37.3571.

3e. Powles T, Durán I, van der Heijden MS, et al. Atezolizumab versus chemotherapy in patients with platinum-treated locally advanced or metastatic urothelial carcinoma (IMvigor211): a multicentre, open-label, phase 3 randomised controlled trial. Lancet. 2018 Feb 24;391(10122):748-757. doi: 10.1016/S0140-6736(17)33297-X.

4e. Bellmunt J, de Wit R, Vaughn DJ, et al. Pembrolizumab as Second-Line Therapy for Advanced Urothelial Carcinoma. N Engl J Med. 2017;376(11):1015–1026. doi:10.1056/NEJMoa1613683.

5e. Sharma P, Retz M, Siefker-Radtke A, et al. Nivolumab in metastatic urothelial carcinoma after platinum therapy (CheckMate 275): a multicentre, single-arm, phase 2 trial. Lancet Oncol. 2017 Mar;18(3):312-322. doi: 10.1016/S1470-2045(17)30065-7.

6e. Massard C, Gordon MS, Sharma S, et al. Safety and Efficacy of Durvalumab (MEDI4736), an Anti-Programmed Cell Death Ligand-1 Immune Checkpoint Inhibitor, in Patients With Advanced Urothelial Bladder Cancer. J Clin Oncol. 2016;34(26):3119–3125. doi:10.1200/JCO.2016.67.9761.

7e. Patel MR, Ellerton J, Infante JR, et al. Avelumab in metastatic urothelial carcinoma after platinum failure (JAVELIN Solid Tumor): pooled results from two expansion cohorts of an open-label, phase 1 trial. Lancet Oncol. 2018 Jan;19(1):51-64. doi: 10.1016/S1470-2045(17)30900-2.

8e. Siefker-Radtke AO, Necchi A, Park SH, et al. First results from the primary analysis population of the phase 2 study of erdafitinib (ERDA; JNJ-42756493) in patients (pts) with metastatic or unresectable urothelial carcinoma (mUC) and FGFR alterations (FGFRalt). J Clin Oncol 2018;36(15_suppl):4503.

9e. Reck M, Rodríguez-Abreu D, Robinson AG, et al. Pembrolizumab versus Chemotherapy for PD-L1–Positive Non–Small-Cell Lung Cancer. N Engl J Med 2016; 375:1823-1833.

10e. Gandhi L, Rodríguez-Abreu D, Gadgeel S, et al. Pembrolizumab plus Chemotherapy in Metastatic Non–Small-Cell Lung Cancer. N Engl J Med 2018; 378:2078-2092.

11e. Barlesi F, Park K, Ciardiello F, et al. Primary analysis from OAK, a randomized phase III study comparing atezolizumab with docetaxel in 2L/3L NSCLC. Ann of Oncol 2016 Oct;27(suppl_6):LBA44_PR.

12e. Borghaei H, Paz-Ares L, Horn L, et al. Nivolumab versus Docetaxel in Advanced Nonsquamous Non-Small-Cell Lung Cancer. N Engl J Med. 2015;373(17):1627–1639. doi:10.1056/NEJMoa1507643.

13e. Herbst RS, Baas P, Kim DW, et al. Pembrolizumab versus docetaxel for previously treated, PD-L1-positive, advanced non-small-cell lung cancer (KEYNOTE-010): a randomised controlled trial. Lancet. 2016 Apr 9;387(10027):1540-50. doi: 10.1016/S0140-6736(15)01281-7.

14e. Spigel D et al. IMpower110: Interim OS Analysis of a Phase III Study of Atezolizumab (atezo) vs Platinum-Based Chemotherapy (chemo) as 1L Treatment (tx) in PD-L1–selected NSCLC [ESMO 2019 Abstract LBA78].

15e. Paz-Ares L, Dvorkin M, Chen Y, et al. Durvalumab plus platinum-etoposide versus platinum-etoposide in first-line treatment of extensive-stage small-cell lung cancer (CASPIAN): a randomised, controlled, open-label, phase 3 trial. Lancet. 2019;394(10212):1929-1939. doi:10.1016/S0140-6736(19)32222-6.

16e. Zalcman G, Peters S, Mansfield AS, et al. Checkmate 743: A phase 3, randomized, open-label trial of nivolumab (nivo) plus ipilimumab (ipi) vs pemetrexed plus cisplatin or carboplatin as first-line therapy in unresectable pleural mesothelioma. Journal of Clinical Oncology 2017 35:15_suppl, TPS8581-TPS8581.

17e. 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. Lancet Oncol. 2019 Jul;20(7):924-937. doi: 10.1016/S1470-2045(19)30167-6. Epub 2019 May 20.

18e. Powles T, Park SH, Voog E, et al. Maintenance avelumab + best supportive care (BSC) versus BSC alone after platinum-based first-line (1L) chemotherapy in advanced urothelial carcinoma (UC): JAVELIN Bladder 100 phase III interim analysis. J Clin Oncol. 2020;38(18_suppl):LBA1-LBA1.

19e. Cortes J, Cescon DW, Rugo HS, et al. KEYNOTE-355: Randomized, double-blind, phase III study of pembrolizumab + chemotherapy versus placebo + chemotherapy for previously untreated locally recurrent inoperable or metastatic triple-negative breast cancer. Journal of Clinical Oncology38, no. 15_suppl(May 20, 2020)1000-1000.

20e. Sezer A, Kilickap S, Gümüş M, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet. 2021 Feb 13;397(10274):592-604.

21e. Miles D, Gligorov J, André F, et al. Primary results from IMpassion131, a double-blind, placebo-controlled, randomised phase III trial of first-line paclitaxel with or without atezolizumab for unresectable locally advanced/metastatic triple-negative breast cancer. Ann Oncol. 2021 Aug;32(8):994-1004. doi: 10.1016/j.annonc.2021.05.801. Epub 2021 Jul 1.

22e. Fennell DA, Ewings S, Ottensmeier C, et al. Nivolumab versus placebo in patients with relapsed malignant mesothelioma (CONFIRM): a multicentre, double-blind, randomised, phase 3 trial. Lancet Oncol 2021; 22:1530.

23e. Galsky MD, Arija JÁA, Bamias A, et al; IMvigor130 Study Group. Atezolizumab with or without chemotherapy in metastatic urothelial cancer (IMvigor130): a multicentre, randomised, placebo-

controlled phase 3 trial. Lancet. 2020 May 16;395(10236):1547-1557. doi: 10.1016/S0140-6736(20)30230-0. PMID: 32416780.

24e. Johnson ML, Cho BC, Luft A, et al; POSEIDON investigators. 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. J Clin Oncol. 2022 Nov 3:JCO2200975. doi: 10.1200/JCO.22.00975.

25e. 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). Annals of Oncology, ISSN: 0923-7534, Vol: 32, SUPPLEMENT 5, S1328, SEPTEMBER 01, 2021. DOI10.1016/j.annonc.2021.08.2130.

26e. Wilky BA, Trucco MM, Subhawong TK, et al. Axitinib plus pembrolizumab in patients with advanced sarcomas including alveolar soft-part sarcoma: a single-centre, single-arm, phase 2 trial. Lancet Oncol. 2019 Jun;20(6):837-848. doi: 10.1016/S1470-2045(19)30153-6. Epub 2019 May 8.

27e. D'Alessio A, Fulgenzi CAM, Nishida N, et al. Preliminary evidence of safety and tolerability of atezolizumab plus bevacizumab in patients with hepatocellular carcinoma and Child-Pugh A and B cirrhosis: A real-world study. Hepatology. 2022 Oct;76(4):1000-1012. doi: 10.1002/hep.32468.

28e. Stacchiotti S, Negri T, Zaffaroni N, et al. Sunitinib in advanced alveolar soft part sarcoma: evidence of a direct antitumor effect. Ann Oncol. 2011 Jul;22(7):1682-1690. doi: 10.1093/annonc/mdq644. Epub 2011 Jan 17.

29e. Stacchiotti S, Mir O, Le Cesne A, et al. Activity of Pazopanib and Trabectedin in Advanced Alveolar Soft Part Sarcoma. Oncologist. 2018 Jan;23(1):62-70. doi: 10.1634/theoncologist.2017-0161. Epub 2017 Jul 28.

30e. Kudo M. Durvalumab plus tremelimumab in unresectable hepatocellular carcinoma. Hepatobiliary Surgery and Nutrition. 2022;11(4):592-596. doi:https://doi.org/10.21037/hbsn-22-143

31e. Ascierto PA, Dréno B, Larkin J, et al. 5-Year Outcomes with Cobimetinib plus Vemurafenib in BRAFV600 Mutation–Positive Advanced Melanoma: Extended Follow-up of the coBRIM Study. Clinical Cancer Research. 2021;27(19):5225-5235. doi:https://doi.org/10.1158/1078-0432.ccr-21-0809

32e. Robert C, Karaszewska B, Schachter J, et al. Improved Overall Survival in Melanoma with Combined Dabrafenib and Trametinib. New England Journal of Medicine. 2015;372(1):30-39. doi:https://doi.org/10.1056/nejmoa1412690

33e. Dummer R, Ascierto PA, Gogas HJ, et al. Encorafenib plus binimetinib versus vemurafenib or encorafenib in patients with BRAF-mutant melanoma (COLUMBUS): a multicentre, open-label, randomised phase 3 trial. The Lancet Oncology. 2018;19(5):603-615. doi:https://doi.org/10.1016/S1470-2045(18)30142-6

34e. Ferrucci PF, Giacomo AMD, Vecchio MD, et al. KEYNOTE-022 part 3: a randomized, double-blind, phase 2 study of pembrolizumab, dabrafenib, and trametinib in BRAF-mutant melanoma. Journal for ImmunoTherapy of Cancer. 2020;8(2):e001806. doi:https://doi.org/10.1136/jitc-2020-001806

35e. Frumovitz M, Munsell MF, Burzawa JK, et al. Combination therapy with topotecan, paclitaxel, and bevacizumab improves progression-free survival in recurrent small cell neuroendocrine carcinoma of the cervix. Gynecol Oncol. 2017 Jan;144(1):46-50.

36e. Tempfer CB, Tischoff I, Dogan A, et al. Neuroendocrine carcinoma of the cervix: a systematic review of the literature. BMC Cancer 2018;18:530.

37e. Colombo N, Dubot C, Lorusso D, et al. Pembrolizumab for Persistent, Recurrent, or Metastatic Cervical Cancer. *New England Journal of Medicine*. 2021;385(20). doi:https://doi.org/10.1056/nejmoa2112435

38e. Lee SM, Schulz C, Prabhash K, et al. First-line atezolizumab monotherapy versus single-agent chemotherapy in patients with non-small-cell lung cancer ineligible for treatment with a platinum-containing regimen (IPSOS): a phase 3, global, multicentre, open-label, randomised controlled study. Lancet. 2023 Aug 5;402(10400):451-463. doi: 10.1016/S0140-6736(23)00774-2.

39e. Terashima T, Kido H, Takata N, et al. Phase II Study of Atezolizumab and Bevacizumab Combination Therapy for Patients with Advanced Hepatocellular Carcinoma Previously Treated with Lenvatinib. Cancers. 2025;17(2):278-278. doi:https://doi.org/10.3390/cancers17020278

40e. Mori N, Tamaki N, Takaki S, et al. Treatment response to durvalumab plus tremelimumab after progression with previous immune checkpoint inhibitor in unresectable hepatocellular carcinoma. Investigational New Drugs. 2024;42(5):559-565. doi:https://doi.org/10.1007/s10637-024-01470-y

41e. Prime Therapeutics Management. Tecentriq IV Clinical Literature Review Analysis. Last updated July 2025. Accessed July 2025.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C22.0	Liver cell carcinoma
C22.8	Malignant neoplasm of liver, primary, unspecified as to type
C22.9	Malignant neoplasm of liver, not specified as primary or secondary
C33	Malignant neoplasm of trachea
C34.00	Malignant neoplasm of unspecified main bronchus
C34.01	Malignant neoplasm of right main bronchus
C34.02	Malignant neoplasm of left main bronchus

ICD-10	ICD-10 Description
C34.10	Malignant neoplasm of upper lobe, unspecified bronchus or lung
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung
C34.2	Malignant neoplasm of middle lobe, bronchus or lung
C34.30	Malignant neoplasm of lower lobe, unspecified bronchus or lung
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung
C34.80	Malignant neoplasm of overlapping sites of unspecified bronchus and lung
C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung
C34.90	Malignant neoplasm of unspecified part of unspecified bronchus or lung
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung
C43.0	Malignant melanoma of lip
C43.111	Malignant melanoma of right upper eyelid, including canthus
C43.112	Malignant melanoma of right lower eyelid, including canthus
C43.121	Malignant melanoma of left upper eyelid, including canthus
C43.122	Malignant melanoma of left lower eyelid, including canthus
C43.20	Malignant melanoma of unspecified ear and external auricular canal
C43.21	Malignant melanoma of right ear and external auricular canal
C43.22	Malignant melanoma of left ear and external auricular canal
C43.30	Malignant melanoma of unspecified part of face
C43.31	Malignant melanoma of nose
C43.39	Malignant melanoma of other parts of face
C43.4	Malignant melanoma of scalp and neck
C43.51	Malignant melanoma of anal skin
C43.52	Malignant melanoma of skin of breast
C43.59	Malignant melanoma of other part of trunk
C43.60	Malignant melanoma of unspecified upper limb, including shoulder
C43.61	Malignant melanoma of right upper limb, including shoulder
C43.62	Malignant melanoma of left upper limb, including shoulder
C43.70	Malignant melanoma of unspecified lower limb, including hip

ICD-10	ICD-10 Description
C43.71	Malignant melanoma of right lower limb, including hip
C43.72	Malignant melanoma of left lower limb, including hip
C43.8	Malignant melanoma of overlapping sites of skin
C43.9	Malignant melanoma of skin, unspecified
C45.1	Mesothelioma of peritoneum
C45.2	Mesothelioma of pericardium
C45.7	Mesothelioma of other sites
C45.9	Mesothelioma, unspecified
C49.0	Malignant neoplasm of connective and soft tissue of head, face and neck
C49.10	Malignant neoplasm of connective and soft tissue of unspecified upper limb, including shoulder
C49.11	Malignant neoplasm of connective and soft tissue of right upper limb including shoulder
C49.12	Malignant neoplasm of connective and soft tissue of left upper limb, including shoulder
C49.20	Malignant neoplasm of connective and soft tissue of unspecified lower limb, including hip
C49.21	Malignant neoplasm of connective and soft tissue of right lower limb, including hip
C49.22	Malignant neoplasm of connective and soft tissue of left lower limb, including hip
C49.3	Malignant neoplasm of connective and soft tissue of thorax
C49.4	Malignant neoplasm of connective and soft tissue of abdomen
C49.5	Malignant neoplasm of connective and soft tissue of pelvis
C49.6	Malignant neoplasm of connective and soft tissue of trunk, unspecified
C49.8	Malignant neoplasm of overlapping sites of connective and soft tissue
C49.9	Malignant neoplasm of connective and soft tissue, unspecified
C53.0	Malignant neoplasm of endocervix
C53.1	Malignant neoplasm of exocervix
C53.8	Malignant neoplasm of overlapping sites of cervix uteri
C53.9	Malignant neoplasm of cervix uteri, unspecified
C7A.1	Malignant poorly differentiated neuroendocrine tumors
D19.1	Benign neoplasm of mesothelial tissue of peritoneum
Z85.118	Personal history of other malignant neoplasm of bronchus and lung
Z85.831	Personal history of malignant neoplasm of soft tissue

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA): N/A

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC