

MEDICAL POLICY – 5.01.591


Immune Checkpoint Inhibitors

Effective Date: Nov. 1, 2024
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Replaces: N/A

RELATED POLICIES/GUIDELINES:
5.01.543 General Medical Necessity Criteria for Companion Diagnostics Related to Drug Approval
5.01.589 BRAF and MEK Inhibitors
11.01.523 Site of Service: Infusion Drugs and Biologic Agents

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Introduction

Chemotherapy, often called chemo, is cancer treatment that uses drugs. Radiation and surgery treat one area of cancer. But chemo usually travels through the bloodstream to treat the whole body. Treating the whole body is called a systemic treatment. Immunotherapy is a new type of cancer treatment that helps the body's immune cells fight the cancer more effectively. Cancer cells sometimes "hide" from the body's cells that are designed to search for cells that don't belong, like cancer cells or bacteria. Immune checkpoint inhibitors are drugs that block the way that cancer cells do this and so help the immune cells find them so they can be stopped. It is one of the ways we can make the environment less friendly to the cancer and slow its growth.

Current immunotherapy drugs are complex molecules that must be given through a vein (intravenous). In the future, some may be given by a shot (injection) the individual could inject without help. This policy gives information about immunotherapy drugs and the criteria for when they may be medically necessary.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

We will review specific intravenous (IV) and injectable drugs for medical necessity for all ages.

For those age 13 and older, we also will review the site of service for medical necessity. Site of service is defined as the location where the drug is administered, such as a hospital-based outpatient setting, an infusion center, a physician’s office, or at home. Click [here](#) to be directed to the site of service review criteria.

Drugs subject to site of service review addressed in this policy are:

- Keytruda (pembrolizumab)
- Opdivo (nivolumab)

Note: Keytruda and Opdivo are subject to review for site of service administration except when it is used concurrently with other IV medications for cancer treatment.

Site of Service Administration	Medical Necessity
Medically necessary sites of service <ul style="list-style-type: none"> • Physician’s office • Infusion center • Home infusion 	IV infusion therapy of various medical or biologic agents will be covered in the most appropriate, safe and cost-effective site: <ul style="list-style-type: none"> • These are the preferred medically necessary sites of service for specified drugs.
Hospital-based outpatient setting <ul style="list-style-type: none"> • Outpatient hospital IV infusion department • Hospital-based outpatient clinical level of care 	IV infusion therapy of various medical or biologic agents will be covered in the most appropriate, safe and cost-effective site. <p>This site is considered medically necessary for the first 90 days for the following:</p> <ul style="list-style-type: none"> • The initial course of infusion of a pharmacologic or biologic agent <p>OR</p> <ul style="list-style-type: none"> • Re-initiation of an agent after 6 months or longer following discontinuation of therapy*



Site of Service Administration	Medical Necessity
	<p>*Note: This does not include when standard dosing between infusions is 6 months or longer</p> <p>This site is considered medically necessary when there is no outpatient infusion center within 50 miles of the individual’s home and there is no contracted home infusion agency that will travel to their home, or a hospital is the only place that offers infusions of this drug.</p> <p>This site is considered medically necessary only when the individual has a clinical condition which puts him or her at increased risk of complications for infusions, including any ONE of the following:</p> <ul style="list-style-type: none"> • Known cardiac condition (e.g., symptomatic cardiac arrhythmia) or pulmonary condition (e.g., significant respiratory disease, serious obstructive airway disease, %FVC ≤ 40%) that may increase the risk of an adverse reaction • Unstable renal function which decreases the ability to respond to fluids • Difficult or unstable vascular access • Acute mental status changes or cognitive conditions that impact the safety of infusion therapy • A known history of severe adverse drug reactions and/or anaphylaxis to prior treatment with a related or similar drug
<p>Hospital-based outpatient setting</p> <ul style="list-style-type: none"> • Outpatient hospital IV infusion department • Hospital-based outpatient clinical level of care 	<p>These sites are considered not medically necessary for infusion and injectable therapy services of various medical and biologic agents when the site-of-service criteria in this policy are not met.</p>



Drug	Medical Necessity
<p>PD-L1 inhibitor</p> <ul style="list-style-type: none"> • Imfinzi (durvalumab) IV 	<p>Imfinzi (durvalumab) may be considered medically necessary when all the following are met:</p> <ul style="list-style-type: none"> • The individual is aged 18 years or older <p>AND</p> <ul style="list-style-type: none"> • The individual meets one of the following: <ul style="list-style-type: none"> ○ Has resectable (tumors \geq 4 cm and/or node positive) non-small cell lung cancer (NSCLC) and no known epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) rearrangements and Imfinzi (durvalumab) will be used in combination with platinum-containing chemotherapy as neoadjuvant treatment followed by Imfinzi (durvalumab) as a single agent ○ Has unresectable, stage III NSCLC whose disease has not progressed following concurrent platinum-based chemotherapy and radiation therapy ○ Has metastatic NSCLC with no sensitizing EGFR mutations or ALK genomic tumor aberrations and Imfinzi (durvalumab) will be used in combination with Imjudo (tremelimumab-actl) and platinum-based chemotherapy ○ Requires first-line treatment of extensive-stage small cell lung cancer (ES-SCLC) and Imfinzi (durvalumab) will be used in combination with etoposide and either carboplatin or cisplatin ○ Has locally advanced or metastatic biliary tract cancer (BTC) and Imfinzi (durvalumab) will be used in combination with gemcitabine and cisplatin ○ Has unresectable hepatocellular carcinoma (uHCC) and Imfinzi (durvalumab) will be used in combination with Imjudo (tremelimumab-actl) ○ Has primary advanced or recurrent endometrial cancer that is mismatch repair deficient (dMMR) and Imfinzi (durvalumab) will be used in combination with carboplatin and paclitaxel followed by Imfinzi (durvalumab) as a single agent



Drug	Medical Necessity
<p>CTLA-4 Inhibitor</p> <ul style="list-style-type: none"> Imjudo (tremelimumab-actl) IV 	<p>Imjudo (tremelimumab-actl) may be considered medically necessary when all the following are met:</p> <ul style="list-style-type: none"> The individual is aged 18 years or older <p>AND</p> <ul style="list-style-type: none"> The individual meets one of the following: <ul style="list-style-type: none"> Has unresectable hepatocellular carcinoma (uHCC) and Imjudo (tremelimumab-actl) will be used in combination with Imfinzi (durvalumab) Has metastatic NSCLC with no sensitizing epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) genomic tumor aberrations and Imjudo (tremelimumab-actl) will be used in combination with Imfinzi (durvalumab) and platinum-based chemotherapy
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> Jemperli (dostarlimab-gxly) IV 	<p>Jemperli (dostarlimab-gxly) may be considered medically necessary for the treatment of adults with primary advanced or recurrent endometrial cancer when all the following are met:</p> <ul style="list-style-type: none"> The individual is aged 18 years or older Has been diagnosed with primary advanced or recurrent endometrial cancer Jemperli (dostarlimab-gxly) will be used in combination with carboplatin and paclitaxel <p>Jemperli (dostarlimab-gxly) may be considered medically necessary for the treatment of adults with recurrent or advanced endometrial cancer when all the following are met:</p> <ul style="list-style-type: none"> The individual is aged 18 years or older Has been diagnosed with recurrent or advanced endometrial cancer that is mismatch repair deficient (dMMR)* Has progressed on or following prior treatment with a platinum (e.g., cisplatin, carboplatin, oxaliplatin) containing regimen Is not a candidate for curative surgery or radiation <p>Jemperli (dostarlimab-gxly) may be considered medically necessary for the treatment of adults with recurrent or advanced solid tumors when all the following are met:</p> <ul style="list-style-type: none"> The individual is aged 18 years or older



Drug	Medical Necessity
	<ul style="list-style-type: none"> • Has been diagnosed with recurrent or advanced solid tumors that is mismatch repair deficient (dMMR)* • Has progressed on or following prior treatment • Has no satisfactory alternative treatment options <p>*Note: FDA-approved testing confirming the presence of a specific genetic feature known as mismatch repair deficient (dMMR) is required before coverage determination for Jemperli can be established.</p>
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> • Keytruda (pembrolizumab) IV 	<p>Keytruda (pembrolizumab) is subject to review for site of service administration except when it is used concurrently with other IV medications for cancer treatment.</p> <p>Keytruda (pembrolizumab) may be considered medically necessary for treatment of any of the following:</p> <ul style="list-style-type: none"> • Unresectable or metastatic melanoma • Adjuvant treatment of adult and pediatric (Aged 12 years and older) individuals with Stage IIB, IIC, or III melanoma following complete resection • Adjuvant treatment of individuals with melanoma with involvement of lymph node(s) following complete resection • Metastatic NSCLC: <ul style="list-style-type: none"> ○ First-line as a single agent in individuals with PD-L1 protein overexpression [Tumor Proportion Score (TPS) $\geq 1\%$], with no EGFR or ALK/ROS1 genomic tumor mutations ○ First-line treatment of metastatic non-squamous NSCLC when used in combination with Alimta (pemetrexed) or Pempfexy (pemetrexed) and platinum chemotherapy (e.g., cisplatin, carboplatin, oxaliplatin) in individuals with no EGFR or ALK/ROS1 genomic tumor aberrations or while awaiting the results of such confirmed genomic testing ○ First-line treatment of metastatic squamous NSCLC in combination with carboplatin and either paclitaxel or Abraxane (paclitaxel protein-bound) ○ With PD-L1 expression with disease progression on or after platinum-containing chemotherapy treatment



Drug	Medical Necessity
	<ul style="list-style-type: none"> ○ With EGFR or ALK/ROS1 genomic mutations who have disease progression on U.S. Food and Drug Administration (FDA) -approved therapy for these mutations (i.e., anti-EGFR or anti-ALK/ROS1 agents) • Metastatic or stage III NSCLC where individuals are not candidates for surgical resection or definitive chemoradiation when: <ul style="list-style-type: none"> ○ Used as a single agent for the first-line treatment of individuals expressing PD-L1 [Tumor Proportion Score (TPS) \geq 1%] ○ No EGFR or ALK/ROS1 genomic tumor mutations • Resectable (tumors \geq 4 cm or node positive) non-small cell lung cancer (NSCLC) in combination with platinum-containing chemotherapy as neoadjuvant treatment and then continued as a single agent as adjuvant treatment after surgery • Stage IB (T2a \geq 4 cm), II, or IIIA non-small cell lung cancer (NSCLC) <ul style="list-style-type: none"> ○ Used as a single agent, as adjuvant treatment following resection and platinum-based chemotherapy in adult individuals • Metastatic or unresectable, recurrent head and neck squamous cell carcinoma (HNSCC) when used in combination with platinum and FU for first-line treatment • Recurrent or metastatic HNSCC with disease progression on or after platinum-containing chemotherapy • Metastatic or with unresectable, recurrent HNSCC whose tumors express PD-L1 [Combined Positive Score (CPS) \geq 1] as a single agent for the first line treatment • Adult individuals with relapsed or refractory classical Hodgkin lymphoma (cHL) • Pediatric individuals with refractory classical Hodgkin lymphoma (cHL), or cHL who have relapsed after 2 or more prior lines of therapy • Adult and pediatric individuals with Refractory Primary Mediastinal Large B-Cell Lymphoma (PMBCL), or who have relapsed after 2 or more prior lines of therapy • For locally advanced or metastatic urothelial carcinoma:



Drug	Medical Necessity
	<ul style="list-style-type: none"> ○ In individuals who are not eligible for cisplatin-containing chemotherapy and whose tumors express PD-L1 [Combined Positive Score (CPS) \geq 10] ○ In individuals who are not eligible for any platinum-containing chemotherapy regardless of PD-L1 status ○ In individuals who have disease progression during or following platinum-containing therapy or within 12 months of neoadjuvant or adjuvant treatment with platinum-containing chemotherapy ○ When used in combination with Padcev (enfortumab vedotin-ejfv) in adults ● Treatment of individuals with Bacillus Calmette-Guerin (BCG)-unresponsive, high-risk, non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without papillary tumors who are ineligible for or have elected not to undergo cystectomy. ● Unresectable or metastatic, microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR): <ul style="list-style-type: none"> ○ Solid tumors that have progressed following prior treatment and who have no satisfactory alternative treatment options ○ Colorectal cancer that has progressed following treatment with a fluoropyrimidine, oxaliplatin, and irinotecan ● First-line treatment of MSI-H or mismatch repair deficient (dMMR) unresectable or metastatic colorectal cancer ● First-line treatment of individuals with locally advanced unresectable or metastatic HER2-positive gastric or gastroesophageal junction (GEJ) adenocarcinoma when used in combination with trastuzumab, fluoropyrimidine- and platinum (e.g., cisplatin, carboplatin, oxaliplatin) containing chemotherapy ● First-line treatment of individuals with locally advanced unresectable or metastatic HER2-negative gastric or gastroesophageal junction (GEJ) adenocarcinoma when used in combination with fluoropyrimidine- and platinum- (e.g., cisplatin, carboplatin, oxaliplatin) containing chemotherapy



Drug	Medical Necessity
	<ul style="list-style-type: none"> • Locally advanced or metastatic esophageal or GEJ (tumors with epicenter 1 to 5 centimeters above the GEJ) carcinoma that is not amenable to surgical resection or definitive chemoradiation either: <ul style="list-style-type: none"> ○ In combination with platinum (e.g., cisplatin, carboplatin, oxaliplatin) and fluoropyrimidine (e.g., 5-fluorouracil, capecitabine) containing chemotherapy ○ As a single agent after one or more prior lines of systemic therapy with tumors of squamous cell histology that express PD-L1 (CPS \geq 10) • Recurrent or metastatic cervical cancer with disease progression on or after chemotherapy whose tumors express PD-L1 (CPS \geq1) • In combination with chemotherapy, with or without bevacizumab, for the treatment of individuals with persistent, recurrent, or metastatic cervical cancer whose tumors express PD-L1 (CPS \geq1) • In combination with chemoradiotherapy (CRT), for the treatment of individuals with FIGO 2014 Stage III-IVA cervical cancer • Hepatocellular carcinoma (HCC) previously treated with Nexavar (sorafenib) • Hepatocellular carcinoma (HCC) secondary to hepatitis B who have received prior systemic therapy other than a PD-1/PD-L1-containing regimen • Adult and pediatric individuals with recurrent locally advanced or metastatic Merkel cell carcinoma (MCC) • First-line treatment of individuals with advanced renal cell carcinoma (RCC) in combination with Inlyta (axitinib) • First-line treatment of individuals with advanced RCC in combination with Lenvima (lenvatinib) • Adjuvant treatment of individuals with RCC at intermediate-high or high risk of recurrence following nephrectomy, or following nephrectomy and resection of metastatic lesions • In combination with lenvatinib, for the treatment of individuals with advanced endometrial carcinoma who have disease



Drug	Medical Necessity
	<p>progression following prior systemic therapy and are not candidates for curative surgery or radiation</p> <ul style="list-style-type: none"> • As a single agent, for the treatment of individuals with advanced endometrial carcinoma that is microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) who have disease progression following prior systemic therapy and are not candidates for curative surgery or radiation • Adults with primary advanced or recurrent endometrial carcinoma in combination with carboplatin and paclitaxel followed by Keytruda (pembrolizumab) as a single agent • Adult and pediatric individuals with unresectable or metastatic tumor mutational burden-high (TMB-H) [≥ 10 mutations/megabase (mut/Mb)] solid tumors that have progressed following prior treatment and who have no satisfactory alternative treatment options • Recurrent or metastatic cutaneous squamous cell carcinoma (cSCC) or locally advanced cSCC that is not curable by surgery or radiation • In combination with chemotherapy for the treatment of individuals with locally recurrent unresectable or metastatic triple-negative breast cancer (TNBC) whose tumors express PD-L1 (CPS ≥ 10) • High-risk early-stage triple-negative breast cancer (TNBC) in combination with chemotherapy as neoadjuvant treatment, and then continued as a single agent as adjuvant treatment after surgery. • Locally advanced unresectable or metastatic biliary tract cancer (BTC) in combination with gemcitabine and cisplatin <p>Note: FDA-approved testing confirming presence of PD-L1, EGFR, or ALK/ROS1 proteins or TMB-H is required before coverage determination for Keytruda can be established.</p>
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> • Libtayo (cemiplimab) IV 	<p>Libtayo (cemiplimab) may be considered medically necessary for the treatment of individuals with:</p> <ul style="list-style-type: none"> • Metastatic cutaneous squamous cell carcinoma (CSCC) or locally advanced CSCC who are not candidates for curative surgery or curative radiation



Drug	Medical Necessity
	<ul style="list-style-type: none"> Locally advanced or metastatic basal cell carcinoma previously treated with a hedgehog pathway inhibitor (e.g., Erivedge [vismodegib], Odomzo [sonidegib]) or for whom a hedgehog pathway inhibitor is not appropriate Locally advanced, where individuals are not candidates for surgical resection or definitive chemoradiation, or metastatic non-small cell lung cancer (NSCLC) whose tumors have high PD-L1 expression [Tumor Proportion Score (TPS) \geq 50%] with no EGFR, ALK or ROS1 aberrations when Libtayo is used as a single agent for first-line treatment Locally advanced, where individuals are not candidates for surgical resection or definitive chemoradiation, or metastatic NSCLC with no EGFR, ALK or ROS1 aberrations when Libtayo is used in combination with platinum (e.g., cisplatin, carboplatin, oxaliplatin) based chemotherapy for first-line treatment
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> Loqtorzi (toripalimab-tpzi) IV 	<p>Loqtorzi (toripalimab-tpzi) may be considered medically necessary for the treatment of any of the following:</p> <ul style="list-style-type: none"> Adults with metastatic or with recurrent locally advanced nasopharyngeal carcinoma (NPC) in combination with cisplatin and gemcitabine Adults with recurrent unresectable or metastatic NPC with disease progression on or after a platinum-containing chemotherapy
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> Opdivo (nivolumab) IV 	<p>Opdivo (nivolumab) is subject to review for site of service administration except when it is used concurrently with other IV medications for cancer treatment.</p> <p>Opdivo (nivolumab) may be considered medically necessary for treatment of any of the following:</p> <ul style="list-style-type: none"> Adjuvant treatment of completely resected Stage IIB, Stage IIC, Stage III, or Stage IV melanoma in individuals 12 years and older Unresectable or metastatic melanoma, in combination with Yervoy (ipilimumab) Intermediate or poor-risk, previously untreated advanced renal cell carcinoma, in combination with Yervoy (ipilimumab)



Drug	Medical Necessity
	<ul style="list-style-type: none"> • Melanoma with lymph node involvement or metastatic disease who have undergone complete resection, in the adjuvant setting • Resectable (tumors ≥ 4 cm or node positive) non-small cell lung cancer (NSCLC) in the neoadjuvant setting, in combination with platinum-doublet chemotherapy (e.g., cisplatin and gemcitabine, cisplatin and pemetrexed, carboplatin and paclitaxel) • Metastatic non-small cell lung cancer (NSCLC) expressing PD-L1 ($\geq 1\%$) as determined by an FDA-approved test, with no EGFR or ALK/ROS1 genomic tumor aberrations, as first-line treatment in combination with Yervoy (ipilimumab) • Metastatic or recurrent non-small cell lung cancer (NSCLC), with no EGFR or ALK/ROS1 genomic tumor aberrations, as first-line treatment in combination with Yervoy (ipilimumab) and 2 cycles of platinum-doublet (e.g., carboplatin and pemetrexed, cisplatin and pemetrexed, carboplatin and paclitaxel) chemotherapy • Metastatic non-small cell lung cancer (NSCLC) and progression on or after platinum-based chemotherapy. Individuals with EGFR or ALK/ROS1 genomic tumor aberrations should have disease progression on FDA-approved therapy for these aberrations prior to receiving Opdivo (nivolumab) • Unresectable malignant pleural mesothelioma as first-line treatment in combination with Yervoy (ipilimumab) • Advanced renal cell carcinoma who have received prior anti-angiogenic therapy • First-line treatment of individuals with advanced renal cell carcinoma (RCC) in combination with Cabometyx (cabozantinib) • Classical Hodgkin lymphoma (cHL) that has relapsed or progressed after: <ul style="list-style-type: none"> ○ Autologous hematopoietic stem cell transplantation (HSCT) and brentuximab vedotin <p>OR</p> <ul style="list-style-type: none"> ○ Three or more lines of systemic therapy that includes autologous HSCT



Drug	Medical Necessity
	<ul style="list-style-type: none"> • First-line treatment in adults with stage I or II classical Hodgkin lymphoma with one or more high-risk features (e.g., mediastinal adenopathy > 1/3 maximum transverse chest diameter, involvement of >3 lymph node regions on one side of the diaphragm, age >50 years, erythrocyte sedimentation rate [ESR] of 50, or ESR >30 with one of the following: intermittent fever of >38 °C, drenching night sweats, or >10% unintentional weight loss over 6 months) in combination with doxorubicin, vinblastine, and dacarbazine • First-line treatment in adults with stages IIb through IV classical Hodgkin lymphoma in combination with doxorubicin, vinblastine, and dacarbazine • Recurrent or metastatic squamous cell carcinoma of the head and neck with disease progression on or after a platinum-based therapy • First-line treatment in adults with unresectable or metastatic urothelial carcinoma with use in combination with cisplatin and gemcitabine • Adjuvant treatment of individuals with urothelial carcinoma (UC) who are at high risk of recurrence after undergoing radical resection of UC • Locally advanced or metastatic urothelial carcinoma in individuals with: <ul style="list-style-type: none"> ○ Disease progression during or following platinum-containing chemotherapy ○ Disease progression within 12 months of neoadjuvant or adjuvant treatment with platinum-containing chemotherapy • Microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) metastatic colorectal cancer that has progressed following treatment with a fluoropyrimidine, oxaliplatin, and irinotecan, as a single agent or in combination with Yervoy (ipilimumab) • Hepatocellular carcinoma who have been previously treated with sorafenib in combination with Yervoy (ipilimumab) • Adjuvant treatment of completely resected esophageal or gastroesophageal junction cancer with residual pathologic



Drug	Medical Necessity
	<p>disease in adult individuals who have received neoadjuvant chemoradiotherapy (CRT)</p> <ul style="list-style-type: none"> • First-line treatment of adult individuals with unresectable advanced or metastatic esophageal squamous cell carcinoma (ESCC) when used in combination with fluoropyrimidine (e.g., 5-fluorouracil, capecitabine) and platinum (e.g., cisplatin, carboplatin, oxaliplatin) containing chemotherapy • First-line treatment of adult individuals with unresectable advanced or metastatic esophageal squamous cell carcinoma (ESCC) when used in combination in combination with Yervoy (ipilimumab) • Unresectable advanced, recurrent or metastatic esophageal squamous cell carcinoma (ESCC) after prior fluoropyrimidine- and platinum-based chemotherapy • Advanced or metastatic gastric cancer, gastroesophageal junction cancer, and esophageal adenocarcinoma when used in combination with fluoropyrimidine (e.g., 5-fluorouracil, capecitabine) and platinum (e.g., cisplatin, carboplatin, oxaliplatin) containing chemotherapy
<p>Opdivo (nivolumab) IV in combination with Yervoy (ipilimumab) IV</p>	<p>Opdivo (nivolumab) in combination with Yervoy (ipilimumab) may be considered medically necessary for:</p> <ul style="list-style-type: none"> • Treatment of unresectable or metastatic melanoma • First-line treatment of metastatic non-small cell lung cancer (NSCLC) expressing PD-L1 ($\geq 1\%$) as determined by an FDA-approved test, with no EGFR or ALK/ROS1 genomic tumor aberrations • Metastatic or recurrent non-small cell lung cancer (NSCLC), with no EGFR or ALK/ROS1 genomic tumor aberrations, as first-line treatment in combination with 2 cycles of platinum-doublet (e.g., carboplatin and pemetrexed, cisplatin and pemetrexed, carboplatin and paclitaxel) chemotherapy • Unresectable malignant pleural mesothelioma as first-line treatment • Treatment of individuals with intermediate or poor-risk, previously untreated advanced renal cell carcinoma • Microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) metastatic colorectal cancer that has



Drug	Medical Necessity
	<p>progressed following treatment with a fluoropyrimidine, oxaliplatin, and irinotecan</p> <ul style="list-style-type: none"> • First-line treatment of adult individuals with unresectable advanced or metastatic esophageal squamous cell carcinoma (ESCC) <p>Note: Opdivo when used in combination with Yervoy is NOT subject to review for site of service administration.</p>
<p>PD-1 inhibitor and LAG-3 inhibitor</p> <ul style="list-style-type: none"> • Opdualag (nivolumab and relatlimab-rmbw) 	<p>Opdualag (nivolumab and relatlimab-rmbw) may be considered medically necessary for:</p> <ul style="list-style-type: none"> • Adult and pediatric individuals aged 12 years and older with unresectable or metastatic melanoma.
<p>CTLA-4 Inhibitor</p> <ul style="list-style-type: none"> • Yervoy (ipilimumab) IV 	<p>Yervoy (ipilimumab) may be considered medically necessary for:</p> <ul style="list-style-type: none"> • Treatment of unresectable or metastatic melanoma in individuals aged 12 years and older • Adjuvant treatment of individuals with cutaneous melanoma with pathologic involvement of regional lymph nodes of more than 1 mm who have undergone complete resection, including total lymphadenectomy • Treatment of individuals with intermediate or poor-risk, previously untreated advanced renal cell carcinoma when used in combination with Opdivo (nivolumab) • Treatment of adult and pediatric individuals aged 12 years and older with microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) metastatic colorectal cancer that has progressed following treatment with a fluoropyrimidine, oxaliplatin, and irinotecan, in combination with nivolumab • As a single agent treatment for brain metastases if active against primary tumor (melanoma) in individuals with recurrent disease • Hepatocellular carcinoma who have been previously treated with sorafenib, in combination with Opdivo (nivolumab) • Metastatic non-small cell lung cancer (NSCLC) expressing PD-L1 ($\geq 1\%$) as determined by an FDA-approved test, with no



Drug	Medical Necessity
	<p>EGFR or ALK/ROS1 genomic tumor aberrations, as first-line treatment in combination with Opdivo (nivolumab)</p> <ul style="list-style-type: none"> Metastatic or recurrent non-small cell lung cancer (NSCLC), with no EGFR or ALK/ROS1 genomic tumor aberrations, as first-line treatment in combination with Opdivo (nivolumab) and 2 cycles of platinum-doublet (e.g., carboplatin and pemetrexed, cisplatin and pemetrexed, carboplatin and paclitaxel) chemotherapy Unresectable malignant pleural mesothelioma as first-line treatment in combination with Opdivo (nivolumab) First-line treatment of adult individuals with unresectable advanced or metastatic esophageal squamous cell carcinoma (ESCC) when used in combination with Opdivo (nivolumab)
<p>PD-L1 inhibitor</p> <ul style="list-style-type: none"> Tecentriq (atezolizumab) IV 	<p>Tecentriq (atezolizumab) may be considered medically necessary for:</p> <ul style="list-style-type: none"> For the first-line treatment of adult individuals with metastatic NSCLC whose tumors have high PD-L1 expression (PD-L1 stained $\geq 50\%$ of tumor cells [TC $\geq 50\%$] or PD-L1 stained tumor-infiltrating immune cells [IC] covering $\geq 10\%$ of the tumor area [IC $\geq 10\%$]), with no EGFR or ALK genomic tumor aberrations For the first-line treatment of adult individuals with metastatic non-squamous non-small cell lung cancer (NSCLC) with no EGFR or ALK genomic tumor aberrations when used in combination with bevacizumab, paclitaxel, and carboplatin For the first-line treatment of adult individuals with metastatic non-squamous non-small cell lung cancer (NSCLC) with no EGFR or ALK genomic tumor aberrations in combination with paclitaxel protein-bound and carboplatin As adjuvant treatment following resection and platinum-based chemotherapy for adult individuals with Stage II and IIIA NSCLC whose tumors have PD-L1 expression on $\geq 1\%$ of tumor cells The treatment of adult individuals with metastatic NSCLC who have disease progression during or following platinum-containing chemotherapy <ul style="list-style-type: none"> Individual with EGFR or ALK/ROS1 genomic tumor aberrations should have disease progression on FDA-



Drug	Medical Necessity
	<p>approved therapy for these aberrations (i.e., anti-EGFR or anti-ALK/ROS1 agents) prior to receiving Tecentriq</p> <ul style="list-style-type: none"> • For the first-line treatment of adult individuals with extensive-stage small cell lung cancer when used in combination with carboplatin and etoposide • The treatment of adult individuals with unresectable or metastatic hepatocellular carcinoma (HCC) who have not received prior systemic therapy when used in combination with bevacizumab • The treatment of individuals with BRAF V600 mutation-positive unresectable or metastatic melanoma when used in combination with Cotellic (cobimetinib) and Zelboraf (vemurafenib) • The treatment of unresectable or metastatic alveolar soft part sarcoma (ASPS) in individuals aged 2 and older when used as a single agent
<p>PD-1 inhibitor</p> <ul style="list-style-type: none"> • Tevimbra (tislelizumab-jsgr) 	<p>Tevimbra (tislelizumab-jsgr) may be considered medically necessary for the treatment of adults with unresectable or metastatic esophageal squamous cell carcinoma (ESCC) after prior systemic chemotherapy that did not include a PD-L1 inhibitor</p>
<p>PD-L1 inhibitor</p> <ul style="list-style-type: none"> • Bavencio (avelumab) IV 	<p>Bavencio (avelumab) may be considered medically necessary for the treatment of:</p> <ul style="list-style-type: none"> • Adults and pediatric individuals aged 12 years and older with metastatic Merkel Cell Carcinoma (MCC) • Maintenance treatment of individuals with locally advanced or metastatic urothelial carcinoma (UC) that has not progressed with first-line platinum-containing chemotherapy • Individuals with locally advanced or metastatic urothelial carcinoma (UC) who: <ul style="list-style-type: none"> ○ Have disease progression during or following platinum-containing chemotherapy ○ Have disease progression within 12 months of neoadjuvant or adjuvant treatment with platinum-containing chemotherapy • First-line treatment, in combination with Inlyta (axitinib) of individuals with advanced renal cell carcinoma (RCC)



Drug	Medical Necessity
PD-L1 inhibitor <ul style="list-style-type: none"> Zynyz (retifanlimab-dlwr) IV 	Zynyz (retifanlimab-dlwr) may be considered medically necessary for: <ul style="list-style-type: none"> The treatment of adult individuals with metastatic or recurrent locally advanced Merkel cell carcinoma (MCC) who may have received surgery or radiation, but have not received a prior systemic therapy

Investigational
All other uses of Bavencio, Imfinzi, Imjudo, Jemperli, Keytruda, Libtayo, Loqtorzi, Opdivo, Opdualag, Tecentriq, Tevimbra, Yervoy, and Zynyz not listed in this policy are considered investigational.

Length of Approval	
Approval	Criteria
Initial authorization	Injectable drugs listed in policy may be approved up to 6 months.
Re-authorization criteria	Future re-authorization of injectable drugs may be approved up to 12 months as long as the drug-specific coverage criteria are met, and chart notes demonstrate that the individual continues to show a positive clinical response to therapy.

Documentation Requirements
The individual’s medical records submitted for review for all conditions should document that medical necessity criteria are met. The record should include the following:

- Office visit notes that contain the diagnosis, relevant history, physical evaluation and medication history

Coding

Code	Description
HCPCS	



Code	Description
J3263	Injection, toripalimab-tpzi, (Loqtorzi) 1 mg (new code effective 7/1/2024)
J9022	Injection, atezolizumab (Tecentriq), 10 mg
J9023	Injection, avelumab (Bavencio), 10 mg
J9119	Injection, cemiplimab-rwlc (Libtayo), 1 mg
J9173	Injection, durvalumab (Imfinzi), 10 mg
J9228	Injection, ipilimumab (Yervoy), 1 mg
J9271	Injection, pembrolizumab (Keytruda), 1 mg
J9272	Injection, dostarlimab-gxly (Jemperli), 10 mg
J9298	Injection, nivolumab and relatlimab-rmbw (Opdualag), 3 mg/1 mg
J9299	Injection, nivolumab (Opdivo), 1 mg
J9329	Injection, tislelizumab-jsgr, 1mg (Tevimbra)
J9345	Injection, retifanlimab-dlwr (Zynyz), 1 mg
J9347	Injection, tremelimumab-actl (Imjudo), 1 mg

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Programmed Cell Death Protein 1 (PD-1)

Programmed cell death protein 1, also known as PD-1 and CD279 (cluster of differentiation 279), is a protein on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the immune system and promoting self-tolerance by suppressing T-cell inflammatory activity. This prevents autoimmune diseases, but it can also prevent the immune system from killing cancer cells. PD-1 is an immune checkpoint and guards against autoimmunity through two mechanisms. First, it promotes apoptosis (programmed cell death) of antigen-specific T-cells in lymph nodes. Second, it reduces apoptosis in regulatory T-cells (anti-inflammatory, suppressive T-cells).



Programmed Death-Ligand 1 (PD-L1)

Programmed death-ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1) is a protein that in humans is encoded by the CD274 gene. PD-L1 is a 40kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the immune system during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. Normally the immune system reacts to foreign antigens that are associated with exogenous or endogenous danger signals, which triggers a proliferation of antigen-specific CD8+ T-cells and/or CD4+ helper cells. The binding of PD-L1 to PD-1 or B7.1 transmits an inhibitory signal that reduces the proliferation of antigen-specific T-cells in lymph nodes, while simultaneously reducing apoptosis in regulatory T-cells (anti-inflammatory, suppressive T-cells) further mediated by a lower regulation of the gene Bcl-2.

PD-1 and PD-L1 Inhibitors

PD-1 inhibitors, a new class of drugs that block PD-1, activate the immune system to attack tumors and are used to treat certain types of cancer. Similarly, PD-L1 inhibitors block PD-L1, preventing it from binding to PD-1. These drugs produce effects similar to PD-1 inhibitors, improving the ability of CD4+ and CD8+ cells to target and eliminate cancer cells.

Benefit Application

The drugs in this policy are managed through the Medical Benefit.

Evidence Review

Description

Imjudo (tremelimumab-actl)

Imjudo (tremelimumab-actl) is a cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4) blocking human IgG2 monoclonal antibody. CTLA-4 is a negative regulator of T-cell activity.

Tremelimumab-actl is a monoclonal antibody that binds to CTLA-4 and blocks the interaction



with its ligands CD80 and CD86, releasing CTLA-4-mediated inhibition of T-cell activation. In synergistic mouse tumor models, blocking CTLA-4 activity resulted in decreased tumor growth and increased proliferation of T cells in tumors.

Jemperli (dostarlimab-gxly)

Jemperli (dostarlimab-gxly) is a programmed death receptor-1 (PD-1)-blocking IgG₄ humanized monoclonal antibody that binds to the PD-1 receptor and blocks its interaction with PD-L1 and PD-L2, releasing PD-1 pathway-mediated inhibition of the immune response, including the anti-tumor immune response.

Keytruda (pembrolizumab)

Keytruda (pembrolizumab) is a programmed death receptor-1 (PD-1)-blocking antibody which is expressed on antigen-stimulated T-cells and induces downstream signaling that inhibits T-cell proliferation, cytokine release, and cytotoxicity. Melanoma and many other tumors express PD-1 ligand (PD-L1) on the cell surface, resulting in suppression of cytotoxic T-cell activity, allowing the tumor to proliferate unchecked.

Opdivo (nivolumab)

Opdivo (nivolumab) is a human monoclonal antibody to programmed death receptor-1 (PD-1), which is expressed on antigen-stimulated T-cells and induces downstream signaling that inhibits T-cell proliferation, cytokine release, and cytotoxicity. Melanoma and many other tumors express PD-1 ligand (PD-L1) on the cell surface, resulting in suppression of cytotoxic T-cell activity.

Opdualag (nivolumab and relatlimab-rmbw)

Opdualag is a combination of nivolumab, a PD-1 blocking antibody, and relatlimab, a lymphocyte activation gene-3 (LAG-3) blocking antibody. LAG-3 blockade enhances the anti-tumor activity of PD-1 blockage. The combination of nivolumab and relatlimab causes a bigger increase in T-cell activation than the activity of either antibody alone.



Tecentriq (atezolizumab)

Tecentriq (atezolizumab) is a monoclonal antibody that binds to PD-L1 and blocks its interactions with both PD-1 and B7.1 receptors. This releases the PD-L1/PD-1 mediated inhibition of the immune response, including activation of the anti-tumor immune response without inducing antibody dependent cellular cytotoxicity. In syngeneic mouse tumor models, blocking PD-L1 activity resulted in decreased tumor growth. PD-L1 may be expressed on tumor cells and/or tumor-infiltrating immune cells and can contribute to the inhibition of the anti-tumor immune response in the tumor microenvironment. Binding of PD-L1 to the PD-1 and B7.1 receptors found on T-cells and antigen presenting cells suppresses cytotoxic T-cell activity, T-cell proliferation and cytokine production.

Yervoy (ipilimumab)

Yervoy (ipilimumab) is a human cytotoxic T-lymphocyte antigen 4 (CTLA-4)-blocking antibody. CTLA-4 is a negative regulator of T-cell activity. Ipilimumab binds to CTLA-4 and blocks the interaction of CTLA-4 with its ligands, CD80/CD86. Blockade of CTLA-4 has been shown to augment T-cell activation and proliferation, including the activation and proliferation of tumor infiltrating T-effector cells. Inhibition of CTLA-4 signaling can also reduce T-regulatory cell function, which may contribute to a general increase in T-cell responsiveness, including the anti-tumor immune response.

Zynyz (retifanlimab-dlwr)

Zynyz (retifanlimab-dlwr) is a programmed death receptor (PD-1) blocking antibody. PDL1 and PDL2 are ligands of the PD-1 receptor found on the T cell. By binding on the PD-1 receptors, PDL1 and PDL2 inhibits the T-cell proliferation and cytokine production. Retifanlimab-dlwr binds to the PD-1 receptor and blocks the binding of PDL1 and PDL2, which blocks the T-cell activities, including the anti-tumor immune response.



Safety and Efficacy

Jemperli (dostarlimab-gxly)

The efficacy of dostarlimab was evaluated in the GARNET study (NCT02715284), a multicenter, multicohort, open-label study conducted in individuals with advanced solid tumors. The efficacy population consisted of a cohort of 71 individuals with mismatch repair deficient (dMMR) recurrent or advanced endometrial cancer who had progressed on or after treatment with a platinum-containing regimen. Individuals with prior treatment with PD-1/PD-L1–blocking antibodies or other immune checkpoint inhibitor therapy and individuals with autoimmune disease that required systemic therapy with immunosuppressant agents within 2 years were excluded from the study.

Individuals received dostarlimab 500 mg intravenously every 3 weeks for 4 doses followed by 1,000 mg intravenously every 6 weeks. Treatment continued until disease progression or unacceptable toxicity. The major efficacy outcome measures were Overall Response Rate (ORR) and Duration of Response (DOR) as assessed by blinded independent central review (BICR) according to the Response Evaluation Criteria in Solid Tumors (RECIST) v 1.1. The confirmed ORR with dostarlimab was 42.3% (95% CI: 30.6%-54.6%) and the DOR median in months was not reached yet at the time of FDA approval.

The most common adverse reactions with dostarlimab are fatigue (48%), nausea (30%), diarrhea (26%), anemia (24%), and constipation (20%). There are warnings and precautions regarding immune-mediated adverse reactions, infusion-related reactions, embryo-fetal toxicity, and complications of allogeneic HSCT.

Libtayo (cemiplimab)

There is currently limited published data available on the efficacy of cemiplimab in the treatment of malignancies. In one fair quality Phase 1, non-randomized, open-label, expansion cohort study, 26 individuals with advanced cutaneous squamous cell carcinoma received cemiplimab showed response to treatment in 50% of individuals and a durable response in 65% of individuals who had a response.

In a fair quality Phase 2, non-randomized, open-label, pivotal cohort study, 59 individuals with metastatic cutaneous squamous cell carcinoma received cemiplimab monotherapy and treatment response was seen in 47% of individuals. Among the 28 individuals who had a response, a durable disease control rate of 61% was observed.



Other potentially supportive studies of cemiplimab in individuals with advanced cutaneous squamous cell carcinoma, lung cancer, ovarian cancer, cervical cancer, and glioblastoma are ongoing.

The most common adverse events seen with cemiplimab in the Phase 1 study were fatigue (27%), constipation, decreased appetite, diarrhea, hypercalcemia, hypophosphatemia, nausea, and urinary tract infection (15%). The most common grade 3 to 5 adverse events were hypercalcemia, skin infection, and failure to thrive. Discontinuation due to adverse events occurred in two individuals in the study.

In the phase 2 study, the most common adverse events were diarrhea (27%), fatigue (24%), nausea (17%), constipation (15%), and rash (15%). Grade 3 to 5 adverse events occurred in more than one individual were pneumonitis, cellulitis, hypercalcemia, pleural effusion, and adverse events resulting in death. Four individuals discontinued due to adverse events during this study.

Opdivo (nivolumab)

The advanced melanoma indication for nivolumab received accelerated biologics license application approval based on tumor response rate and durability of response in one open-label, Phase III trial of nivolumab in adults with unresectable or metastatic melanoma following progression on Yervoy (ipilimumab) and, if BRAF V600 mutation–positive, a BRAF inhibitor (dabrafenib or vemurafenib). An improvement in survival or disease-related symptoms has not yet been established. Phase III trials are to be submitted by the end of 2016. CheckMate-372 was a randomized (2:1), open-label trial in which 370 individuals with unresectable or metastatic melanoma received nivolumab 3 mg/kg every 2 weeks (n=268) or investigator’s choice of chemotherapy (n=102), either dacarbazine or carboplatin plus paclitaxel. Primary end points were objective response rate (ORR), by independent radiology review committee, and overall survival (OS). Secondary end points included progression-free survival (PFS); PD-L1 expression; and health-related quality of life (HRQOL).

Efficacy was assessed in a single-arm, noncomparative, preplanned interim analysis in the first 120 individuals who received nivolumab in Trial 1 and in whom the minimum duration of follow-up was 6 months. Data are unpublished and taken from the label. ORR in the efficacy subset was 32% (95% confidence interval [CI], 23 to 41), consisting of 4 complete responses and 34 partial responses in nivolumab-treated individuals. Of the 38 individuals with responses, 33 individuals (87%) had ongoing responses with durations ranging from 2.6+ to 10+ months, which included 13 individuals with ongoing responses of 6 months or longer. There were objective responses in individuals with and without BRAF V600 mutation–positive melanoma.



Warnings and precautions are generally related to the development of moderate-to-severe immune-mediated reactions in a small number of individuals. This results in administration of corticosteroids and either withholding the drug (in the majority of cases) or discontinuation of the drug. Such reactions included immune-mediated pneumonitis (2.2%), colitis (2.2%), hepatitis (1.1%), nephritis or renal dysfunction (0.7%), hyperthyroidism (3%) or hypothyroidism (8%), or other immune-mediated events (<1%). Nivolumab was discontinued for adverse reactions in 9% of individuals, while 26% of individuals receiving nivolumab had a drug delay for an adverse reaction. Serious adverse reactions occurred in 41% of individuals receiving nivolumab. The most frequent grade 3 and 4 adverse reactions reported in 2% to less than 5% of individuals receiving nivolumab were abdominal pain, hyponatremia, increased aspartate aminotransferase, and increased lipase. The most common adverse reaction was rash (> 20%).

Tecentriq (atezolizumab)

Tecentriq (atezolizumab) was approved under accelerated approval based on tumor response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.

Tecentriq (atezolizumab) was investigated in Study 1, a multicenter, open-label, two-cohort trial that included individuals with locally advanced or metastatic urothelial carcinoma. In Cohort 2 of Study 1, 310 individuals with locally advanced or metastatic urothelial carcinoma who had disease progression during or following a platinum-containing chemotherapy regimen or who had disease progression within 12 months of treatment with a platinum-containing neoadjuvant or adjuvant chemotherapy regimen were treated with Tecentriq. This study excluded individuals who had: a history of autoimmune disease, active or corticosteroid-dependent brain metastases, administration of a live, attenuated vaccine within 28 days prior to enrollment, or administration of systemic immunostimulatory agents or systemic immunosuppressive medications. Individuals received an intravenous infusion of 1200 mg of Tecentriq every 3 weeks until unacceptable toxicity or either radiographic or clinical progression. Tumor response assessments were conducted every 9 weeks for the first 54 weeks and every 12 weeks thereafter.

Major efficacy outcome measures included confirmed ORR as assessed by independent review facility (IRF) using Response Evaluation Criteria in Solid Tumors (RECIST v1.1) and duration of response (DoR). In this cohort, the median age was 66 years, 78% were male, 91% individuals were Caucasian. Twenty-six percent had non-bladder urothelial carcinoma and 78% of individuals had visceral metastases. Sixty-two percent of individuals had an Eastern Cooperative Oncology Group (ECOG) score of 1 and 35% of individuals had a baseline creatinine clearance of < 60 mL/min. Nineteen percent of individuals had disease progression following prior platinum-



containing neoadjuvant or adjuvant chemotherapy. Forty-one percent of individuals had received ≥ 2 prior systemic regimens in the metastatic setting. Seventy-three percent of individuals received prior cisplatin, 26% had prior carboplatin, and 1% were treated with other platinum-based regimens. Tumor specimens were evaluated prospectively using the Ventana PD-L1 (SP142) Assay at a central laboratory, and the results were used to define subgroups for pre-specified analyses.

Of the 310 individuals, 32% were classified as having PD-L1 expression of $\geq 5\%$ (defined as PD-L1 stained tumor-infiltrating immune cells [ICs] covering $\geq 5\%$ of the tumor area). The remaining 68% of individuals were classified as having PD-L1 expression of $<5\%$ (PD-L1 stained tumor infiltrating ICs covering $< 5\%$ of the tumor area). The median follow-up time for this cohort was 14.4 months. In 59 individuals with disease progression following neoadjuvant or adjuvant therapy, the ORR was 22.0% (95% CI: 12.3%, 34.7%).

The efficacy of Tecentriq (atezolizumab) was investigated in two multi-center, international, randomized, open-label trials in individuals with metastatic NSCLC who progressed during or following a platinum-containing regimen. Study 2 was a trial in 1225 individuals with the primary analysis population consisting of the first 850 randomized individuals and Study 3 was a trial in 287 individuals. In both studies, eligible individuals were stratified by PD-L1 expression status in tumor-infiltrating immune cells (IC), by the number of prior chemotherapy regimens, and by histology. Individuals were randomized (1:1) to receive either TECENTRIQ administered intravenously at 1200 mg every 3 weeks until unacceptable toxicity or either radiographic or clinical progression, or docetaxel administered intravenously at 75 mg/m² every 3 weeks until unacceptable toxicity or disease progression.

These studies excluded individuals who had: a history of autoimmune disease, had active or corticosteroid-dependent brain metastases, administration of a live, attenuated vaccine within 28 days prior to enrollment, administration of systemic immunostimulatory agents within 4 weeks or systemic immunosuppressive medications within 2 weeks prior to enrollment. Tumor assessments were conducted every 6 weeks for the first 36 weeks, and every 9 weeks thereafter. In Study 2, tumor specimens were evaluated prospectively for PD-L1 expression on tumor cells (TC) and IC using the VENTANA PD-L1 (SP142) Assay and the results were used to define the PD-L1 expression subgroups for the analyses described below.

In Study 2, among individuals in the primary analysis population, the median age was 64 years (range: 33 to 85), and 61% of individuals were male. The majority of individuals were white (70%). Approximately three-fourths of individuals had non-squamous disease (74%), 10% had known EGFR mutation, 0.2% had known ALK rearrangements, and most individuals were current or previous smokers (82%). Baseline ECOG performance status was 0 (37%) or 1 (63%). Seventy five percent of individuals received only one prior platinum-based therapeutic regimen.



In Study 3, the median age was 62 years (range: 36 to 84), and 59% of individuals were male. The majority of individuals were white (79%). Approximately two-thirds of individuals had non-squamous disease (66%), 7% had known EGFR mutation, 1% had ALK rearrangements, and most individuals were current or previous smokers (80%). Baseline ECOG performance status was 0 (33%) or 1 (67%). Approximately two-thirds of individuals received only one prior platinum-based therapeutic regimen.

The major efficacy outcome measure of Study 2 was OS in the primary analysis population (first 850 randomized individuals).

The major efficacy outcome measure of Study 3 was OS. Other efficacy outcome measures for Study 3 included investigator-assessed objective response rates and duration of response per RECIST v1.1. Tumor specimens were evaluated prospectively using the VENTANA PD-L1 (SP142) Assay at a central laboratory and the results were used to define the PD-L1 expression subgroups for prespecified analyses. Of the 850 individuals, 16% were classified as having high PD-L1 expression, which is defined as having PD-L1 expression on $\geq 50\%$ of TC or $\geq 10\%$ of IC. In an exploratory efficacy subgroup analysis of OS based on PD-L1 expression, the hazard ratio was 0.41 (95% CI: 0.27, 0.64) in the high PD-L1 expression subgroup and 0.82 (95% CI: 0.68, 0.98) in individuals who did not have high PD-L1 expression. Results of an updated survival analysis in Study 3 with a median follow-up of 22 months are provided for all randomized individuals.

Tecentriq (atezolizumab) was approved for the treatment of adult and pediatric individuals 2 years of age and older with unresectable or metastatic alveolar soft part sarcoma (ASPS). The efficacy of atezolizumab was evaluated in an open-label, single-arm study where 49 adult and pediatric individuals with unresectable or metastatic ASPS. The adult individuals received atezolizumab 1200 mg intravenously and pediatric individuals received 15mg/kg (max 1200 mg) intravenously every 21 days until disease progression or unacceptable toxicity. The primary efficacy endpoints were overall response rate (ORR) and duration of response (DOR). The study's overall response rate was 24% (12 individuals). Out of 12 individuals, 67% individuals had DOR of 6 months or more and 42% had a DOR of 12 months or more. Most common adverse reactions in the trial were musculoskeletal pain, fatigue, rash, cough, nausea, headache and hypertension.

Keytruda (pembrolizumab)

Keytruda (pembrolizumab) is approved for multiple indications based on the following clinical evidence.



Unresectable or Metastatic Melanoma

Study KEYNOTE-006 was a randomized, open-label, active-controlled trial evaluating 834 individuals with unresectable or metastatic melanoma and no prior ipilimumab treatment who received either pembrolizumab or ipilimumab. Evaluating pembrolizumab 10 m/kg every 3 weeks or every 2 weeks, pembrolizumab demonstrated significant improvement in the primary endpoints, OS (33%, $p=0.004$ and 30%, $p<0.001$) and PFS (57%, $p<0.001$ and 56%, $p<0.001$), relative to ipilimumab (OS 40% and PFS 68%). Study KEYNOTE-002 was a randomized, blinded, active-controlled trial evaluating 540 individuals with unresectable or metastatic melanoma *with* prior ipilimumab treatment. The study showed statistically significant improvement in PFS for individuals randomized to both dosing regimens of pembrolizumab compared to chemotherapy (72% and 70% vs 87%, $p<0.001$ for all).

Metastatic NSCLC

Study KEYNOTE-024 was a randomized, open-label, active-controlled trial in 305 individuals with metastatic NSCLC and had not received prior systemic treatment for metastatic NSCLC who received either pembrolizumab or chemotherapy. The study showed statistically significant improvement in PFS for individuals randomized to pembrolizumab compared with chemotherapy (47% vs 77%, $p<0.001$). Study KEYNOTE-021 was a randomized, open-label, multi-cohort study evaluating 123 individuals with metastatic NSCLC who received either pembrolizumab in combination with pemetrexed and carboplatin or just pemetrexed and carboplatin. The study showed that there were significant improvements in ORR in the pembrolizumab combination arm (55%) versus the control arm (29%), $p=0.0032$. Study KEYNOTE-010 evaluated 1033 individuals with metastatic NSCLC that had progressed following platinum-containing chemotherapy who received either pembrolizumab or docetaxel. The study demonstrated significant improvements in OS in pembrolizumab compared to docetaxel ($p<0.001$ for all).

Recurrent or Metastatic Head and Neck Cancer

Study KEYNOTE-012 was a non-randomized, open-label study that evaluated 174 individuals with recurrent or metastatic HNSCC who had disease progression on or after platinum-containing chemotherapy who received pembrolizumab. The ORR was 16% (95% CI 11 to 22), with a complete response rate of 5%. Duration of response had not been reached.



Classical Hodgkin Lymphoma

Study KEYNOTE-087 was a non-randomized, open-label study that evaluated 210 individuals with relapsed or refractory cHL who received pembrolizumab. The ORR was 69% (95% CI 62 to 75%) and the duration of response was a median of 11.1 months.

Advanced or Metastatic Urothelial Carcinoma

Study KEYNOTE-052 was an open-label, single-arm trial that evaluated 370 individuals with locally advanced or metastatic urothelial carcinoma who were not eligible for cisplatin-containing chemotherapy. The ORR was 29% (95% CI 24 to 34) and the duration of response was not reached. Study KEYNOTE-045 was a randomized, active-controlled trial that evaluated 542 individuals with disease progression on or after platinum-containing chemotherapy who received pembrolizumab or chemotherapy. The study demonstrated significant improvements in OS and ORR for pembrolizumab compared to chemotherapy (57% vs 66%, $p=0.004$ and 21% vs 11%, $p=0.002$), but there was no statistically significant difference with respect to PFS.

Microsatellite Instability-High Cancer

The efficacy of pembrolizumab was evaluated in individuals with MSI-H or mismatch repair deficient (dMMR), solid tumors enrolled in one of five uncontrolled, open-label, single-arm trials. A total of 149 individuals were evaluated across the five trials. The ORR was 39.6% (95% CI 31.7 to 47.9) across all trials, and the duration of response was not reached.

Locally Advanced or Metastatic Urothelial Carcinoma

The efficacy of pembrolizumab in combination with enfortumab vedotin was evaluated in individuals with locally advanced or metastatic urothelial carcinoma in multi-cohort study, EV-103/Keynote-869. Dose escalation cohort and cohort A, single-arm cohorts, included individuals who received pembrolizumab in combination with enfortumab vedotin, while cohort K included individuals who were randomized to receive either pembrolizumab in combination with enfortumab vedotin or enfortumab alone. In these studies, patients did not receive prior systemic therapy and were not eligible for cisplatin-containing chemotherapy. A total 121 individuals received the combination therapy where the individuals' objective response rate (ORR) and duration of response (doR) were evaluated. The individuals' overall response rate was 68% including 12% of individuals with complete response. The median doR for the dose



escalation cohort plus cohort A was 22 months, and the medial doR was not reached for cohort K.

Stage 1B, II, or IIIA non-small cell lung cancer

The efficacy of pembrolizumab was evaluated in a multicenter, randomized, triple-blind, placebo-controlled KEYNOTE-091 trial where 1177 individuals with stage IB, II or IIIA non-small cell lung cancer randomized 1:1 to receive pembrolizumab 200 mg or placebo intravenously every 3 weeks for up to 1 year. Out of 1177 individuals, 1010 received adjuvant platinum-based chemotherapy following complete resection. The primary outcome was disease-free survival. Overall, the study did achieve statistical significance in the disease-free survival. In 167 individuals who did not receive adjuvant chemotherapy, the disease-free survival hazard ratio was 1.25. In the individuals who received adjuvant chemotherapy, the median disease-free survival was 58.7 months in the treatment group and 34.9 months in the placebo group with hazard ratio of 0.73.

Yervoy (ipilimumab)

Phase III trials suggested a survival benefit in individuals with stage III or IV metastatic melanoma compared to gp-100 (10.1 months vs. 6.4 months). However, the investigators' report of 2 to 3.5 months of increased median overall survival is uncertain due to limitations in the trial design. A majority of immune-related adverse events (irAEs) were reduced upon treatment below their respective baselines. With immediate medical attention and treatment, irAEs are manageable and resolvable.

Clinical trials investigated the safety and efficacy of Yervoy (ipilimumab) in a randomized, double-blind, placebo-controlled trial in individuals with resected Stage IIIA (> 1 mm nodal involvement), IIIB, and IIIC (with no in-transit metastases) histologically confirmed cutaneous melanoma. Individuals were randomized to receive ipilimumab 10 mg/kg or placebo every 3 weeks for 4 doses. Enrollment required complete resection of melanoma with full lymphadenectomy within 12 weeks prior to randomization. Forty-nine percent of the ipilimumab arm experienced recurrence-free survival (RFS), whereas it was 62% in the placebo arm. Fourteen deaths occurred with the intervention and 5 in placebo. The adverse event (AE) rate was more severe at this higher dose compared to 3 mg/kg. Common AEs included rash, pruritus, GI disorders, fatigue, pyrexia, and headache. More severe irAEs included enterocolitis, hepatitis, dermatitis, neuropathy, and endocrinopathy. Endocrine AEs eventually require hormone supplementation.



Bavencio (avelumab)

Bavencio (avelumab) is the first FDA approved pharmacotherapy for Merkel cell carcinoma. avelumab offers a significant increase in ORR and median DOR in individuals with histologically confirmed stage IV Merkel cell carcinoma refractory to chemotherapy. Efficacy was demonstrated irrespective of PD-L1 status, eliminating the need for expensive genetic testing prior to therapy administration.

The evidence supporting avelumab's efficacy was demonstrated in the JAVELIN Merkel 200 trial. The multi-center, open-label, non-randomized trial included 88 individuals with stage IV Merkel cell carcinoma. The efficacy results yielded an ORR of 33.0% (95% CI, 23.3-34.8) with a complete response rate of 11.4% (95% CI, 6.6-19.8) and a partial response rate of 21.6% (95% CI, 13.5-31.7). At the time of the data cutoff the median duration of response had not been reached and response duration had ranged from 2.8 months to 23.3+ months.

Zynyz (retifanlimab-dlwr)

Zynyz (retifanlimab-dlwr), a programmed death receptor -1 (PD-1) inhibitor, is approved for the treatment of adult individuals with metastatic or recurrent locally advanced Merkel cell carcinoma (MCC). The efficacy and safety of Zynyz was evaluated in the PODIUM-201 study, which was a single-arm, open-label, multiregional phase II study involving 65 individuals with locally advanced MCC who had not received prior systemic therapy. Individuals were administered Zynyz 500 mg intravenously every 4 weeks until disease progression, unacceptable toxicity, or up to 24 months. The study's primary efficacy endpoint was objective response rate and duration of response. The objective response rate for the study was 52%, with 18% complete responses and 34% partial responses. Of the 34 individuals with the response, 76% individuals had duration of response for at least 6 months, while 62% individual had duration of response of at least 12 months. The indication was granted accelerated approval based on the tumor objective response rate and duration of response observed in the trial. Continued approval for this indication may be subject to confirmation and description of clinical benefit in confirmatory trials.

The most common adverse effects in the clinical trial were fatigue, musculoskeletal pain, pruritus, diarrhea, rash, pyrexia and nausea. Severe adverse events, such as fatigue, arrhythmia and pneumonitis, were reported in approximately 22% of the individuals. In the trial, about 11%



of the individuals permanently discontinued zynyz due to adverse reactions, such as asthenia, atrial fibrillation, and concomitant disease progression of chronic lymphocytic leukemia, etc.

Tevimbra (tislelizumab-jsgr)

Tevimbra (tislelizumab-jsgr) was approved based the RATIONALE 302 trial, which met its primary endpoint in the intention-to-treat (ITT) population with a statistically significant and clinically meaningful survival benefit for Tevimbra compared with chemotherapy. In the ITT population, the median overall survival (OS) in the Tevimbra arm was 8.6 months (95% CI: 7.5, 10.4) compared to 6.3 months (95% CI: 5.3, 7.0) in the chemotherapy arm ($p=0.0001$; hazard ratio [HR]=0.70 [95% CI: 0.57, 0.85]). The most common ($\geq 20\%$) adverse reactions for Tevimbra, including laboratory abnormalities, were increased glucose, decreased hemoglobin, decreased lymphocytes, decreased sodium, decreased albumin, increased alkaline phosphatase, anemia, fatigue, increased AST, musculoskeletal pain, decreased weight, increased ALT and cough.

Loqtorzi (toripalimab-tpzi)

In the JUPITER-02 Phase 3 study, Loqtorzi combined with chemotherapy reduced the risk of disease progression or death by 48% compared to chemotherapy alone. Loqtorzi treatment resulted in a 37% reduction in the risk of death versus chemotherapy alone. The incidence of Grade ≥ 3 adverse events (AEs) (89.7% vs 90.2%) and fatal AEs (3.4% vs 2.8%) was similar between the two arms. AEs leading to discontinuation of Loqtorzi versus placebo (11.6% vs 4.9%), immune-related adverse events (irAEs) (54.1% vs. 21.7%), and Grade ≥ 3 irAEs (9.6% vs. 1.4%) were more frequent in the Loqtorzi arm. In the POLARIS-02 study, Loqtorzi for individuals with recurrent or metastatic nasopharyngeal carcinoma who failed previous chemotherapy saw an objective response rate (ORR) of 20.5%, a disease control rate (DCR) of 40.0%, and a median OS of 17.4 months.

2019 Update

Reviewed prescribing information for all drugs in policy. Added a new indication identified for Keytruda (pembrolizumab) for esophageal cancer. Bavencio (avelumab), a PD-L1 inhibitor, was moved from policy [5.01.540 Miscellaneous Oncology Drugs](#) into policy [5.01.591 Immune](#)



Checkpoint Inhibitors. Added a new indication for Bavencio for renal cell carcinoma. No additional evidence was identified that would require changes to other drugs listed in this policy.

2020 Update

Reviewed prescribing information for all drugs in policy. Added a new indication identified for Tecentriq (atezolizumab) for the treatment of individuals with BRAF V600 mutation-positive unresectable or metastatic melanoma when used in combination with Cotellic (cobimetinib) and Zelboraf (vemurafenib).

2021 Update

Reviewed prescribing information for all drugs in policy. Added a new indication to Keytruda (pembrolizumab) for locally advanced or metastatic esophageal or gastroesophageal junction (GEJ) (tumors with epicenter 1 to 5 centimeters above the GEJ) carcinoma that is not amenable to surgical resection or definitive chemoradiation when used in combination with platinum- and fluoropyrimidine- containing chemotherapy. Removed from Keytruda (pembrolizumab) coverage for small cell lung cancer as indication was withdrawn due to lack of efficacy in follow-up trials. Added two new indications to Libtayo (cemiplimab). The first indication is locally advanced or metastatic basal cell carcinoma previously treated with a hedgehog pathway inhibitor (e.g., Erivedge [vismodegib], Odomzo [sonidegib]) or for whom a hedgehog pathway inhibitor is not appropriate. The second indication is for locally advanced, where individuals are not candidates for surgical resection or definitive chemoradiation, or metastatic non-small cell lung cancer (NSCLC) whose tumors have high PD-L1 expression [Tumor Proportion Score (TPS) \geq 50%] with no EGFR, ALK or ROS1 aberrations when Libtayo is used as first-line treatment. Added new indication to Opdivo (nivolumab) for first-line treatment of individuals with advanced renal cell carcinoma in combination with Cabometyx (cabozantinib). Removed from Imfinzi (durvalumab) coverage for urothelial carcinoma as indication was withdrawn due to lack of efficacy in follow-up trials. Removed from Tecentriq (atezolizumab) coverage for prior platinum containing chemotherapy for metastatic urothelial carcinoma as indication was withdrawn due to lack of efficacy in follow-up trials.



2022 Update

Reviewed prescribing information for all drugs in policy. Removed from Keytruda (pembrolizumab) coverage as 3rd line monotherapy treatment for individuals with PD-L1-positive gastric or gastroesophageal junction (GEJ) cancer as indication was withdrawn due to lack of efficacy in follow-up trials. Added site of service review for Keytruda (pembrolizumab) and for Opdivo (nivolumab). Keytruda and Opdivo are subject to review for site of service administration except when it is used concurrently with other IV medications for cancer treatment.

2023 Update

Reviewed prescribing information for all drugs in policy. Updated coverage criteria for Tecentriq (atezolizumab) to include the indication for the treatment of adult and pediatric individuals 2 years of age and older with unresectable or metastatic alveolar soft part sarcoma (ASPS). Updated coverage criteria for Keytruda (pembrolizumab) to include the indication for the treatment of for adjuvant treatment following resection and platinum-based chemotherapy for adult individuals with stage IB, II, or IIIA NSCLC, as a single agent. Updated coverage criteria for Keytruda (pembrolizumab) to include the indication for the treatment of adult individuals with locally advanced or metastatic urothelial carcinoma who are not eligible for cisplatin-containing chemotherapy, when used in combination with enfortumab vedotin. Added coverage criteria for Zynyz (retifanlimab-dlwr) for the treatment of adult individuals with metastatic or recurrent locally advanced Merkel cell carcinoma. Added language of "adult individuals" for Keytruda's indication of locally advanced or metastatic urothelial carcinoma when used in combination with Padcev to match FDA label. Grouped the Keytruda indications (NSCLS and urothelial carcinoma) together. Updated coverage criteria for Jemperli (dostarlimab-gxly) to include treatment of certain adult individuals with primary advanced or recurrent endometrial cancer. Updated coverage criteria for Keytruda (pembrolizumab) to include treatment of certain individuals with resectable non-small cell lung cancer (NSCLC) and locally advanced unresectable or metastatic biliary tract cancer. Removed from Opdivo (nivolumab) coverage for BRAF V600 wild type and BRAF V600 mutation-positive unresectable or metastatic melanoma due to removal from FDA approved indications. Updated coverage criteria for Opdivo (nivolumab) to include treatment of certain individuals with completely resected Stage IIB, Stage IIC, Stage III, or Stage IV melanoma.



2024 Update

Reviewed prescribing information for all drugs in policy. Added coverage criteria for Loqtorzi (toripalimab-tpzi). Updated Opdivo (nivolumab) to remove coverage criteria for hepatocellular carcinoma in individuals who have been previously treated with sorafenib as this indication was withdrawn. Updated Keytruda (pembrolizumab) to add coverage criteria for the treatment of certain individuals with Stage III-IVA cervical cancer, and HER2-negative gastric or gastroesophageal junction (GEJ) adenocarcinoma. Updated Keytruda (pembrolizumab) to add coverage criteria for the treatment of adults with locally advanced or metastatic urothelial cancer in combination with Padcev (enfortumab vedotin). Updated Opdivo (nivolumab) to add coverage criteria for adults with unresectable or metastatic urothelial carcinoma in combination with cisplatin and gemcitabine. Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with non-small cell lung cancer (NSCLC) in combination with Pemfexy (pemetrexed). Updated Imjudo (tremelimumab-actl) to add coverage criteria for certain individuals with metastatic NSCLC in combination with Imfinzi (durvalumab). Updated Imfinzi (durvalumab) to add coverage criteria for certain individuals with metastatic NSCLC in combination with Imjudo (tremelimumab-actl). Added coverage criteria for Tevimbra (tislelizumab-jsgr). Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with hepatocellular carcinoma (HCC) secondary to hepatitis B. Updated Imfinzi (durvalumab) to add coverage criteria for certain individuals with primary advanced or recurrent endometrial cancer. Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with primary advanced or recurrent endometrial carcinoma. Clarified that Tecentriq (atezolizumab) use for hepatocellular carcinoma is limited to adults. Updated Imfinzi (durvalumab) to add coverage criteria for certain individuals with non-small cell lung cancer (NSCLC) used in combination with platinum-containing chemotherapy. Updated Opdivo (nivolumab) to add coverage criteria for certain individuals with stage I or II Hodgkin lymphoma with one or more high-risk features. Updated Opdivo (nivolumab) to add coverage criteria for certain individuals with stage IIb through IV Hodgkin lymphoma. Updated Jemperli (dostarlimab-gxly) to include coverage criteria for adults with primary advanced or recurrent endometrial cancer regardless of whether the cancer is mismatch repair deficient (dMMR) or microsatellite instability-high (MSI-H).

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25. Bavencio (avelumab) [package insert]. EMD Serono, Inc., Rockland, MA. Revised March 2024.
26. Libtayo (cemiplimab) [package insert]. Regeneron Pharmaceuticals, Inc. Tarrytown, NY. Revised March 2024.
27. Opdivo (nivolumab) [package insert]. Bristol-Myers Squibb Company, Princeton, NJ. Revised March 2024.
28. Yervoy (ipilimumab) [package insert]. Bristol-Myers Squibb Company, Princeton, NJ. Revised February 2023.
29. Keytruda (pembrolizumab) [package insert]. Merck & Company, Inc., Whitehouse Station, NJ. Revised July 2024.
30. Jemperli (dostarlimab-gxly) [package insert]. GlaxoSmithKline, Research Triangle Park, NC. Revised August 2024.
31. Opdualag (nivolumab and relatlimab-rmbw) [package insert]. Bristol-Myers Squibb Company, Princeton, NJ. Revised March 2024.
32. Imjudo (tremelimumab-actl) [package insert]. AstraZeneca Pharmaceuticals LP, Wilmington, DE. Revised June 2023.
33. Zynyz (retifanlimab-dlwr) [package insert]. Incyte Corporation, Wilmington, DE. Revised November 2023.
34. Tevimbra (tislelizumab-jsgr) [package insert]. BeiGene, San Mateo, CA. Revised March 2024.
35. Loqtorzi (toripalimab-tpzi) [package insert]. Coherus BioSciences, Inc. Revised October 2023.

History

Date	Comments
11/01/18	New policy, approved October 9, 2018. Add to Prescription Drug section. Immunotherapy drugs (atezolizumab, ipilimumab, nivolumab and pembrolizumab) were moved from policy 5.10.540. Medical necessity and reauthorization criteria are provided for these four agents in this policy. Added criteria and information for Cemiplimab.
03/01/19	Interim Review, approved February 12, 2019. Updated criteria for Tecentriq (atezolizumab). Added HCPCS code J9173.
05/01/19	Interim Review, approved April 9, 2019. Updated criteria for Tecentriq (atezolizumab).
08/01/19	Interim Review, approved July 9, 2019. Updated criteria for Keytruda (pembrolizumab).



Date	Comments
10/01/19	Annual Review, approved September 5, 2019. Updated criteria for Bavencio (avelumab) and Keytruda (pembrolizumab). Added HCPCS codes J9023 and J9119. Removed J3490.
02/01/20	Annual Review, approved January 23, 2020. Added new indications for Keytruda (endometrial carcinoma in combination with lenvatinib) and Tecentriq (NSCLC with paclitaxel protein-bound and carboplatin).
03/01/20	Interim Review, approved February 20, 2020. Added a new indication to Keytruda (pembrolizumab) for the treatment of patients with BCG.
06/01/20	Interim Review, approved May 21, 2020. Updated indication for Opdivo for hepatocellular carcinoma for use as monotherapy or in combination with Yervoy. Added new indication to Yervoy for treatment of hepatocellular carcinoma when used in combination with Opdivo.
07/01/20	Interim Review, approved June 9, 2020. Added new indication to Imfinzi (durvalumab) for the treatment of ES-SCLC. Updated Keytruda (pembrolizumab) indications for NSCLC and added a new indication for HNSCC when used in combination with platinum and FU for the first-line treatment. Added new indication to Tecentriq (atezolizumab) for NSCLC whose tumors have high PD-L1 expression and for the treatment of HCC. Added new indication to Opdivo and Yervoy for treatment of NSCLC expressing PD-L1.
08/01/20	Interim Review, approved July 14, 2020. Added new indication to Opdivo for the treatment of ESCC. Added three new indications to Keytruda for the treatment of TMB-H cancer, cSCC and first-line treatment of MSI-H or dMMR CRC. Added new indication to Bavencio for the maintenance treatment of UC.
10/01/20	Interim Review, approved September 17, 2020. Added a new indication to Tecentriq for the treatment of patients with melanoma when used in combination with cobimetinib and vemurafenib.
12/01/20	Interim Review, approved November 10, 2020. Added new indication to Opdivo and Yervoy for treatment of unresectable malignant pleural mesothelioma.
02/01/21	Interim Review, approved January 12, 2021. Updated Keytruda coverage criteria for adults and pediatric patients with R/R cHL. Added new indication to Keytruda for the treatment of TNBC. Removed from Opdivo coverage for metastatic SCLC as indication was withdrawn due to lack of efficacy in follow-up trials. Added new indication to Opdivo and Yervoy when combined and with 2 cycles of platinum-doublet chemotherapy for treatment of metastatic or recurrent NSCLC.
05/01/21	Annual Review, approved April 13, 2021. Added a new indication to Keytruda in combination with platinum- and fluoropyrimidine-based chemotherapy for patients with locally advanced or metastatic esophageal or GEJ carcinoma. Removed from Keytruda coverage for SCLC as indication was withdrawn due to lack of efficacy in follow-up trials. Added new indications to Libtayo for locally advanced or metastatic basal cell carcinoma and for locally advanced or metastatic NSCLC. Added new indication to Opdivo for first-line treatment of advanced RCC in combination with



Date	Comments
	cabozantinib. Removed from Imfinzi coverage for urothelial carcinoma as indication was withdrawn due to lack of efficacy in follow-up trials. Removed from Tecentriq coverage for prior platinum containing chemotherapy for metastatic urothelial carcinoma as indication was withdrawn due to lack of efficacy in follow-up trials.
06/01/21	Interim Review, approved May 11, 2021. Added criteria for Jemperli (dostarlimab-gxly) for the treatment of mismatch repair deficient (dMMR) recurrent or advanced endometrial cancer. Added a new indication to Keytruda (pembrolizumab) for treatment of patients with HER2-positive gastric or gastroesophageal junction (GEJ) adenocarcinoma. Added a new indication to Opdivo (nivolumab) for the treatment of advanced or metastatic gastric cancer, gastroesophageal junction cancer, and esophageal adenocarcinoma. Added HCPCS code J3590.
08/01/21	Interim Review, approved July 22, 2021. Updated Keytruda (pembrolizumab) criteria when used in combination with pemetrexed and platinum chemotherapy for metastatic NSCLC to require patients have no EGFR or ALK genomic tumor aberrations.
09/01/21	Interim Review, approved August 10, 2021. Updated Keytruda (pembrolizumab) indication for cutaneous squamous cell carcinoma (cSCC) to include locally advanced cSCC. Added a new indication to Keytruda (pembrolizumab) for the treatment of high-risk early-stage TNBC. Updated criteria for Opdivo (nivolumab) for the treatment of HCC removing use as a single agent in patients previously treated with sorafenib (Opdivo must be used in combination with Yervoy).
10/01/21	Interim Review, approved September 14, 2021. Added a new indication to Keytruda (pembrolizumab) for the treatment of RCC in combination with lenvatinib. Added a new indication to Jemperli (dostarlimab-gxly) for the treatment of solid tumors. Added a new indication to Opdivo (nivolumab) for the adjuvant treatment of UC in patients who are at high risk of recurrence after undergoing radical resection of UC. Removed from Tecentriq (atezolizumab) coverage for TNBC whose tumors express PD-L1 as indication was withdrawn due to lack of efficacy in follow-up trials. Added HCPCS C9082.
12/01/21	Interim Review, approved November 9, 2021. Added a new indication to Keytruda (pembrolizumab) for the treatment of persistent, recurrent, or metastatic cervical cancer in combination with chemotherapy, with or without bevacizumab. Added a new indication to Tecentriq (atezolizumab) as an adjuvant treatment for adult patients with Stage II and IIIA NSCLC following resection and platinum-based chemotherapy.
01/01/22	Interim Review, approved December 14, 2021. Added a new indication to Keytruda (pembrolizumab) for the adjuvant treatment of adult and pediatric (12 years and older) patients with Stage IIB, IIC, or III melanoma following complete resection. Added a new indication to Keytruda for the adjuvant treatment of patients with RCC at intermediate-high or high risk of recurrence following nephrectomy or following nephrectomy and resection of metastatic lesions. Added HCPCS code J9272 and removed HCPCS code J3590.
04/01/22	Annual Review, approved March 8, 2022. Removed from Keytruda (pembrolizumab) coverage as 3rd line monotherapy treatment for patients with PD-L1-positive gastric or



Date	Comments
	gastroesophageal junction (GEJ) cancer as indication was withdrawn due to lack of efficacy in follow-up trials. Added site of service review for Keytruda (pembrolizumab) and for Opdivo (nivolumab) for dates of service on or after July 7, 2022.
06/01/22	Interim Review, approved May 10, 2022. Added a new indication to Keytruda (pembrolizumab) for the treatment of patients with advanced endometrial carcinoma that is MSI-H or dMMR when used as a single agent. Added a new indication to Opdivo (nivolumab) for neoadjuvant treatment of resectable NSCLC.
08/01/22	Interim Review, approved July 12, 2022. Added coverage to Opdivo (nivolumab) for the adjuvant treatment of completely resected esophageal or gastroesophageal junction cancer in adult patients who have received neoadjuvant CRT. Added coverage to Opdivo (nivolumab) for the first-line treatment of adult patients with unresectable advanced or metastatic ESCC when used in combination with fluoropyrimidine- and platinum-containing chemotherapy OR when used in combination in combination with Yervoy (ipilimumab). Added coverage to Yervoy (ipilimumab) for the first-line treatment of adult patients with unresectable advanced or metastatic ESCC when used in combination with Opdivo (nivolumab).
11/01/22	Interim Review, approved October 11, 2022. Added coverage to Imfinzi for use in combination with gemcitabine and cisplatin for the treatment of adult individuals with locally advanced or metastatic biliary tract cancer. Added Opdivo for the treatment of adult and pediatric individuals 12 years of age or older with unresectable or metastatic melanoma. Updated Keytruda criteria when used in combination with lenvatinib for the treatment of advanced endometrial carcinoma by removing the requirement the cancer is not microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR). Updated Keytruda when used as a single agent for esophageal or GEJ carcinoma to require the tumor to be of squamous cell histology. Added HCPCS code J9298. Changed the wording from "patient" to "individual" throughout the policy for standardization.
01/01/23	Interim Review, approved December 13, 2022. Added coverage for Imjudo (tremelimumab-actl), in combination with Imfinzi (durvalumab), for the treatment of unresectable hepatocellular carcinoma (uHCC). Added a new indication to Imfinzi (durvalumab), when used in combination with Imjudo (tremelimumab-actl), for the treatment of uHCC. Updated Keytruda indication for NSCLC when used in combination with pemetrexed and platinum chemotherapy for first-line treatment to require the NSCLC is non-squamous and to allow for coverage initiation while awaiting the results of confirmed genomic testing. Added a new indication to Libtayo (cemiplimab) for use in combination with platinum-based chemotherapy for first-line advanced NSCLC. Removed coverage from Tecentriq (atezolizumab) for the treatment of adult patients with locally advanced or metastatic urothelial carcinoma as indication was withdrawn due to lack of efficacy in follow-up trials. Removed termed HCPC code C9082 and new code effective date from HCPC code J9272. Added HCPC code J3590 to report Imjudo.
04/01/23	Coding update. Added new HCPCS code C9147.
06/01/23	Annual Review, approved May 9, 2023. Reviewed prescribing information for all drugs in policy. Updated coverage criteria for Tecentriq (atezolizumab) to include the indication for the treatment of adult and pediatric individuals 2 years of age and older



Date	Comments
	with unresectable or metastatic alveolar soft part sarcoma (ASPS). Updated coverage criteria for Keytruda (pembrolizumab) to include the indication for the treatment of for adjuvant treatment following resection and platinum-based chemotherapy for adult individuals with stage IB, II, or IIIA NSCLC, as a single agent. Updated coverage criteria for Keytruda (pembrolizumab) to include the indication for the treatment of adult individuals with locally advanced or metastatic urothelial carcinoma who are not eligible for cisplatin-containing chemotherapy, when used in combination with enfortumab vedotin. Added coverage criteria for Zynyz (retifanlimab-dlwr) for the treatment of adult individuals with metastatic or recurrent locally advanced Merkel cell carcinoma.
07/01/23	Interim Review, approved June 26, 2023. Made minor update to Zynyz criteria. Updated Zynyz criteria to include individuals “who may have received surgery or radiation” for the indication Merkel cell carcinoma (MCC). Made minor update and added T2a > 4cm to Keytruda’s criteria for stage IB, II, or IIIA NSCLC to match FDA label. Added language of “adult individuals” for Keytruda’s indication of locally advanced or metastatic urothelial carcinoma when used in combination with Padcev to match FDA label. Grouped the Keytruda indications (NSCLC and urothelial carcinoma) together. Added termed date for deleted code C9147 and added new HCPCS code J9347.
10/01/23	Coding update. Added new HCPCS code J9345.
01/01/24	Interim Review, approved December 12, 2023. Updated coverage criteria for Jemperli (dostarlimab-gxly) to include treatment of certain adult individuals with primary advanced or recurrent endometrial cancer. Updated coverage criteria for Keytruda (pembrolizumab) to include treatment of certain individuals with resectable non-small cell lung cancer (NSCLC) and locally advanced unresectable or metastatic biliary tract cancer. Removed from Opdivo (nivolumab) coverage for BRAF V600 wild type and BRAF V600 mutation-positive unresectable or metastatic melanoma due to removal from FDA approved indications. Updated coverage criteria for Opdivo (nivolumab) to include treatment of certain individuals with completely resected Stage IIB, Stage IIC, Stage III, or Stage IV melanoma. Added new HCPCS code J9258.
05/01/24	Annual Review, approved April 9, 2024. Added coverage criteria for Loqtorzi (toripalimab-tpzi). Updated Opdivo (nivolumab) to remove coverage criteria for hepatocellular carcinoma in individuals who have been previously treated with sorafenib as this indication was withdrawn. Updated Keytruda (pembrolizumab) to add coverage criteria for the treatment of certain individuals with Stage III-IVA cervical cancer, and HER2-negative gastric or gastroesophageal junction (GEJ) adenocarcinoma. Updated Keytruda (pembrolizumab) to add coverage criteria for the treatment of adults with locally advanced or metastatic urothelial cancer in combination with Padcev (enfortumab vedotin). Updated Opdivo (nivolumab) to add coverage criteria for adults with unresectable or metastatic urothelial carcinoma in combination with cisplatin and gemcitabine. Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with non-small cell lung cancer (NSCLC) in combination with Pempfexy (pemetrexed). Updated Imjudo (tremelimumab-actl) to add coverage criteria for certain individuals with metastatic NSCLC in combination with Imfinzi (durvalumab). Updated



Date	Comments
	Imfinzi (durvalumab) to add coverage criteria for certain individuals with metastatic NSCLC in combination with Imjudo (tremelimumab-actl). Added coverage criteria for Tevimbra (tislelizumab-jsgr).
07/01/24	Coding update. Added new HCPCS code J3263 effective 7/1/2024. Removed drug name Loqtorzi from unlisted code, J3590.
09/01/24	Interim Review, approved August 13, 2024. Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with hepatocellular carcinoma (HCC) secondary to hepatitis B. Updated Imfinzi (durvalumab) to add coverage criteria for certain individuals with primary advanced or recurrent endometrial cancer. Updated Keytruda (pembrolizumab) to add coverage criteria for certain individuals with primary advanced or recurrent endometrial carcinoma. Removed HCPCS J9258.
10/01/24	Coding update. Added new HCPCS code J9329 effective 10/1/2024 for Tevimbra. Removed unlisted HCPCS code, J3590.
11/01/24	Interim Review, approved October 8, 2024. Clarified that Tecentriq (atezolizumab) use for hepatocellular carcinoma is limited to adults. Updated Imfinzi (durvalumab) to add coverage criteria for certain individuals with non-small cell lung cancer (NSCLC) used in combination with platinum-containing chemotherapy. Updated Opdivo (nivolumab) to add coverage criteria for certain individuals with stage I or II Hodgkin lymphoma with one or more high-risk features. Updated Opdivo (nivolumab) to add coverage criteria for certain individuals with stage IIb through IV Hodgkin lymphoma. Updated Jemperli (dostarlimab-gxly) to include coverage criteria for adults with primary advanced or recurrent endometrial cancer regardless of whether the cancer is mismatch repair deficient (dMMR) or microsatellite instability-high (MSI-H).

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2024 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.

