



**Cohere Medical Policy –
Positron Emission Tomography
(PET)/PET-Computed Tomography (CT)**
Clinical Guidelines for Medical Necessity Review

Version: 5
Revision Date: March 13, 2025

Important Notices

Notices & Disclaimers:

GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine the medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third-party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision-making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice.

©2025 Cohere Health, Inc. All Rights Reserved.

Other Notices:

HCPCS® and CPT® copyright 2025 American Medical Association. All rights reserved.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

HCPCS and CPT are registered trademarks of the American Medical Association.

Guideline Information:

Specialty Area: Diagnostic Imaging

Guideline Name: Cohere Medical Policy – Positron Emission Tomography (PET), PET/Computed Tomography (CT)

Date of last literature review: 3/11/2025

Document last updated: 3/12/2025

Type: ☒ Adult (18+ yo) | ☒ Pediatric (0-17 yo)

Table of Contents

Important Notices	2
Table of Contents	3
Medical Necessity Criteria	4
Service: Positron Emission Tomography (PET), PET/Computed Tomography (CT)	4
Recommended Clinical Approach	4
Medical Necessity Criteria	4
Indications	4
Non-Indications	15
Level of Care Criteria	17
Procedure Codes (CPT/HCPCS)	18
Medical Evidence	21
References	23
Clinical Guideline Revision History/Information	35

Medical Necessity Criteria

Service: Positron Emission Tomography (PET), PET/Computed Tomography (CT)

Recommended Clinical Approach

Positron emission tomography (PET) is a non-invasive diagnostic imaging procedure used to evaluate the metabolic activity in tissues. This technology is particularly useful for assessing oncologic, cardiovascular diseases and neurological disorders. Before undergoing a PET scan, patients typically undergo a series of preliminary assessments, including history and physical examination, and often other imaging studies like MRI or CT scans, which guide the need for further metabolic imaging⁵⁷⁻⁵⁸.

Oncologic positron emission tomography (PET) is considered advanced imaging and best utilized per institutional oncologic protocols and oncologic (e.g., National Comprehensive Cancer Network [NCCN]) and radiological society guidelines including the Society of Nuclear Medicine and Molecular Imaging (SNMMI), the European Association of Nuclear Medicine (EANM), and the American College of Radiology (ACR). The decision to perform oncologic PET is often made at institutional tumor board meetings after multidisciplinary oncology teams review the case. Teams may include oncologic surgeons, radiation oncologists, medical oncologists, pathologists, and radiologists.¹⁻³

Medical Necessity Criteria

Indications

→ **Positron emission tomography (PET) with or without concurrently acquired computed tomography (CT)(PET/CT) using**

fluorodeoxyglucose (FDG) is considered appropriate if **ANY** of the following is **TRUE**¹⁻³:

- ◆ Initial diagnosis of **ANY** of the following strongly suspected primary cancer/tumor types:
 - Anal carcinoma, biopsy-proven, if initial CT scan is insufficient for complete diagnosis⁵; **OR**
 - Adrenal tumor with **ANY** of the following:
 - When conventional imaging and biochemical evaluation are highly suggestive of adrenocortical carcinoma; **OR**
 - Pheochromocytoma/paraganglioma when initial SSTR PET is negative⁴; **OR**
 - Bladder cancer (muscle-invasive) when prior imaging suggests disease beyond urinary tract⁶; **OR**
 - Brain metastases with unknown primary with **ALL** of the following⁸:
 - Initial CT of the abdomen/pelvis; **AND**
 - Initial brain MRI; **AND**
 - Initial CT of the chest; **OR**
 - Breast cancer with prior indeterminate imaging^{1,9-12}; **OR**
 - Cervical cancer with prior indeterminate imaging (pelvic MRI is also indicated in addition to PET); **OR**¹³⁻¹⁴
 - Colorectal cancer with **ANY** of the following¹⁵⁻¹⁷:
 - When standard imaging (CT chest, abdomen, and pelvis) cannot be performed or is indeterminate; **OR**
 - Potentially surgically curable metastatic disease (abdominal MRI is indicated in addition to PET when there are known or suspected liver metastases); **OR**
 - When image-guided liver-directed therapies are being considered; **OR**

- Endometrial carcinoma with prior indeterminate imaging¹⁸⁻¹⁹; **OR**
- Esophageal cancer after initial workup with CT/MRI if there was no evidence of metastatic disease²⁰⁻²¹; **OR**
- Gastric cancer after initial workup with CT/MRI if there was no evidence of metastatic disease²²; **OR**
- Head and neck cancer (in addition to PET, neck CT (or MRI) alongside CT (or MRI) of the primary site of disease are indicated)²⁴⁻²⁶; **OR**
- Lung cancer, non-small cell (brain MRI is also indicated in addition to PET)^{27,68}; **OR**
- Lung cancer, small cell²⁸⁻²⁹; **OR**
- Lymphoma (depending on the subtype, neck CT, chest CT, brain MRI, and abdomen/pelvis CT may also be indicated in addition to PET)³⁰⁻³¹; **OR**
- Biopsy-confirmed melanoma with **ANY** of the following³²:
 - Positive sentinel node; **OR**
 - Standard imaging (CT chest, abdomen, pelvis) cannot be performed or is indeterminate for metastatic disease; **OR**
 - When the primary site is unknown and standard imaging is negative; **OR**
 - For surgical planning purposes; **OR**
 - Prior to initiation of systemic therapy; **OR**
 - Uveal melanoma⁶⁹; **OR**
 - Mucosal melanoma; **OR**
- Multiple myeloma³³; **OR**
- Smoldering myeloma³³; **OR**
- POEMS Syndrome³³; **OR**
- Epithelial ovarian cancer/fallopian tube cancer/primary peritoneal cancer with **ANY** of the following³⁴⁻³⁶:

- With prior indeterminate imaging; **OR**
- To direct the management of indeterminate lesions found on other imaging; **OR**
- Pancreatic cancer with **ANY** of the following³⁷⁻³⁸:
 - With prior indeterminate imaging; **OR**
 - When surgical resection is being considered; **OR**
 - With **ANY** of the following high-risk features:
 - ◆ Borderline resectable disease; **OR**
 - ◆ Markedly elevated CA19-9 (>180 U/ml); **OR**
 - ◆ Largely primary tumor/lymph nodes; **OR**
 - ◆ Patient is symptomatic (i.e., jaundice, gastric outlet obstruction, venous thromboembolism, extreme pain, excessive weight loss); **OR**
- Peritoneal mesothelioma, if suspected based on recurrent ascites or peritoneal thickening/mass⁶⁶; **OR**
- Pleural mesothelioma (chest CT is indicated in addition to PET)³⁹; **OR**
- Squamous cell skin carcinoma when the lymph node or metastatic site has been biopsied and shows disease spread⁴⁵; **OR**
- Ewing sarcoma (chest CT and CT/MRI of the primary site are also indicated in addition to PET)⁷; **OR**
- Osteosarcoma (chest CT and CT/MRI of the primary site are also indicated in addition to PET)⁷; **OR**
- Soft tissue sarcoma with prior indeterminate imaging (chest CT and CT/MRI of the primary site are also indicated in addition to PET)⁴⁶; **OR**
- Vulvar cancer (note: for vulvovaginal melanoma, see melanoma indication above) with **ANY** of the following⁵²:
 - Prior indeterminate imaging; **OR**
 - Tumor extends beyond vulva/perineum; **OR**

- Positive sentinel nodes; **OR**
- Locally advanced disease (i.e. – unresectable without removing proximal urethra/bladder/anus); **OR**
- Unresectable nodes; **OR**
- Leukemia with **ANY** of the following:
 - Acute lymphoblastic leukemia (ALL) if lymphomatous extramedullary disease is suspected⁷⁰; **OR**
 - Acute myeloid leukemia (AML) if extramedullary disease is suspected⁷¹; **OR**
 - Chronic lymphocytic leukemia (CLL) in order to direct nodal biopsy if histologic transformation (Richter transformation) is suspected⁷²; **OR**
 - Adult T-cell leukemia³¹; **OR**
- Other unspecified primary cancer/tumor when PET is felt to be necessary to sufficiently diagnose disease (i.e., initial presentation with suspected metastasis); **OR**
- ◆ Response to treatment monitoring or re-staging of **ANY** of the following biopsy-proven primary cancer/tumor types:
 - Adrenal⁴; **OR**
 - Anal⁵; **OR**
 - Bladder⁶; **OR**
 - Bone⁷; **OR**
 - Brain/central nervous system⁸; **OR**
 - Breast (including evaluation of response to hormonal therapy)¹⁹⁻¹²; **OR**
 - Cervical¹³⁻¹⁴; **OR**
 - Colorectal¹⁵⁻¹⁷; **OR**
 - Endometrial¹⁸⁻¹⁹; **OR**
 - Esophageal²⁰⁻²¹; **OR**
 - Gastric²²; **OR**
 - Gestational trophoblastic neoplasia²³; **OR**

- Head and neck²⁴⁻²⁶; **OR**
- Leukemia with lymphomatous extramedullary disease^{70,71}; **OR**
- Lung cancer, non-small cell²⁷; **OR**
- Lung cancer, small cell²⁸⁻²⁹; **OR**
- Lymphoma³⁰⁻³¹; **OR**
- Melanoma, cutaneous³²; **OR**
- Multiple myeloma³³; **OR**
- Ovarian³⁴⁻³⁶; **OR**
- Pancreatic³⁷⁻³⁸; **OR**
- Pleural mesothelioma³⁹; **OR**
- Prostate (including evaluation of response to hormonal therapy)⁴⁰⁻⁴⁴; **OR**
- Squamous cell carcinoma of the skin⁴⁵; **OR**
- Soft tissue sarcoma⁴⁶⁻⁴⁷; **OR**
- Testes⁴⁸⁻⁴⁹; **OR**
- Thyroid⁵⁰⁻⁵¹; **OR**
- Vulvar⁵²; **OR**
- Surveillance by **FDG-PET** or **PET/CT** (defined as monitoring after completion of treatment [radiotherapy, chemotherapy, surgery, etc.] as appropriate) is indicated for **ANY** of the following:
 - Adrenal tumor (pheochromocytoma/paraganglioma) with **ALL** of the following⁴:
 - Either locally unresectable disease or distant metastases; **AND**
 - **ANY** of the following:
 - ◆ Bone-dominant disease; **OR**
 - ◆ Prior SSTR-positive disease on SSTR-PET/CT; **OR**
 - ◆ When considering radionuclide therapy; **OR**
 - Bladder carcinoma that is known or suspected to be metastatic⁶; **OR**

- Ewing sarcoma⁷; **OR**
- Osteosarcoma⁷; **OR**
- Adult glioma or meningioma that is recurrent or progressive⁸; **OR**
- Breast cancer that is known or suspected to be metastatic⁹; **OR**
- Cervical cancer that is stage III or higher in the first 2 years following treatment¹³; **OR**
- Colorectal cancer with **ANY** of the following^{15,16}:
 - Stage IV colon or rectal cancer before or after image-guided liver-directed therapies for liver metastases (i.e., thermal ablation, radioembolization); **OR**
 - Stage IV colon or rectal cancer with serial CEA elevation during follow-up; **OR**
- Endometrial cancer with suspected recurrence or metastasis based on clinical symptoms, physical findings, or abnormal laboratory results¹⁸; **OR**
- Esophageal cancer with **ANY** of the following²⁰:
 - Single assessment of response to chemoradiation when performed at least 5 weeks after completion of therapy; **OR**
 - Among patients who cannot undergo traditional CT scan, PET/CT is appropriate every 6 months for up to 2 years, and then annually for up to 5 years; **OR**
- Gastric cancer patients who cannot undergo traditional CT scan²²; **OR**
- Gestational trophoblastic neoplasia upon completion of treatment, and then every 6–12 months for 3 years²³; **OR**
- Head and neck cancer if the end-of-therapy PET demonstrates possible residual disease, one additional PET

is appropriate at least 6 weeks after end-of-therapy PET as it may help identify those patients who can be safely observed without additional treatment²⁴; **OR**

- Leukemia with lymphomatous extramedullary disease^{70,71}; **OR**
- Lung cancer (non-small cell) after definitive treatment and **ANY** of the following²⁷:
 - Known or suspected recurrence; **OR**
 - CT scan with indeterminate findings; **OR**
- Lung cancer (small cell) only if contrast CT or MRI is contraindicated²⁸; **OR**
- T-cell/Non-Hodgkin lymphoma for **ANY** of the following:
 - Prior indeterminate imaging requiring shorter interval follow-up (i.e., every 3 months); **OR**
 - No more than every 6 months for 2 years, and then annually for 5 years or as clinically indicated³¹; **OR**
- Melanoma, cutaneous, for **ANY** of the following³²:
 - Primary disease in the extremities; **OR**
 - When previous disease was only able to be seen on PET: every 3 to 12 months for 2 years, and then every 6 to 12 months for another 3 years; **OR**
- Multiple myeloma surveillance on an annual basis, indefinitely³³; **OR**
- Ovarian cancer for **ANY** of the following³⁴:
 - When tumor markers are considered unreliable; **OR**
 - The physical exam is unreliable; **OR**
 - There is a high risk of recurrence; **OR**
 - Malignant sex cord-stromal tumors when patients have symptoms, elevated biomarkers, or suspicious findings on physical exam; **OR**
- Pancreatic cancer with **ALL** of the following:

- Prior formal pancreatic CT protocol; **AND**
- High-risk feature, including but not limited to: equivocal or indeterminate imaging findings, markedly elevated CA 19-9, large primary tumors, or large regional lymph nodes³⁷; **OR**
- Pleural mesothelioma⁶³⁻⁶⁵; **OR**
- Squamous cell carcinoma of the skin that is regional or S-ITM (satellite/in-transit metastasis [i.e., growing more than 2 centimeters away from primary tumor site]) if there is a risk of subclinical (i.e., not readily observable) recurrence⁴⁵; **OR**
- Soft tissue sarcoma⁴⁶; **OR**
- Testicular cancer (seminoma) for **ANY** of the following⁴⁸:
 - Bulky clinical stage IIB, IIC, or stage III may be imaged every 4 months for the first year, every 6 months for the second year, annually for years 3 and 4, and as clinically indicated for years 5 and beyond; **OR**
 - Any recurrent seminoma as clinically indicated; **OR**
- Thyroid cancer with **ANY** of the following⁵⁰:
 - Medullary carcinoma that is 2-3 months postop if calcitonin rises significantly (i.e., greater than 150 pg/mL), or if CEA is elevated; **OR**
 - Anaplastic carcinoma that is 3-6 months after completion of initial therapy; **OR**
- Vulvar cancer that is 3-6 months after definitive treatment⁵²; **OR**
- Vulvar or vulvovaginal melanoma every 4-12 months⁵²; **OR**
- Other evaluation of a new clinical sign or symptom that is concerning for progression, recurrence, or metastasis; **OR**
- ◆ Characterization of solitary pulmonary nodules (SPNs) as seen on low-dose CT or chest CT with **ANY** of the following:

- Greater than 8 millimeters in diameter (solid); **OR**
- Greater than 6 millimeters for part-solid nodules⁶²; **OR**
- ◆ **F-18 fluciclovine, choline C-11, or prostate-specific membrane antigen (PSMA [using F-18 piflufolastat, F-18 flutufolastat, or Ga-68 PSMA-11]) PET** and the patient has prostate cancer/tumor and **ANY** of the following⁴⁰⁻⁴⁴:
 - Diagnosis of prostate cancer (except fluciclovine) with equivocal results on initial bone scan and **ANY** of the following⁴⁰⁻⁴⁴:
 - Regional or metastatic disease; **OR**
 - Clinically localized disease that is unfavorable, intermediate, or high-risk with equivocal or indeterminate conventional imaging (i.e., bone scan, CT abdomen and/or pelvis, MRI pelvis, prostate MRI); **OR**
 - Prostate cancer after prostatectomy with **ANY** of the following⁴⁰:
 - PSA (prostate-specific antigen) does not fall to undetectable levels; **OR**
 - Undetectable PSA after radical prostatectomy with a subsequent detectable PSA that increases on at least 2 subsequent determinations; **OR**
 - To monitor known or suspected metastatic prostate cancer; **OR**
 - An increasing PSA or positive rectal exam after radiation therapy if the patient is a candidate for additional local therapy or systemic therapy; **OR**
 - Surveillance of new lesions (this includes additional confirmatory imaging after 8-12 weeks) with **ALL** of the following:
 - Falling PSA or soft tissue response; **AND**

- The absence of pain progression ; **OR**
- The patient has been treated with radiation therapy and **ANY** of the following:
 - An increase of PSA by 2 ng/mL or greater above the lowest post-treatment PSA; **OR**
 - PSA increasing after radiation therapy and the patient is a candidate for salvage local therapy (even if the lowest PSA value is under 2 ng/mL); **OR**
- Initial treatment planning for suspected metastatic disease; **OR**
- Staging for individuals with a diagnosis of unfavorable intermediate-risk, high-risk, or very high-risk prostate cancer; **OR**
- GA-68 PSMA-11 PET/CT before initial treatment with lutetium Lu 177 vipivotide tetraxetan for metastatic castration-resistant prostate cancer; **OR**
- ◆ **Dotatate PET** for **ANY** of the following:
 - Meningioma when prior MRI or CT is indeterminate⁷⁸⁻⁸¹; **OR**
 - The patient has a well-differentiated neuroendocrine tumor and **ANY** of the following^{4,53};
 - Diagnosis; **OR**
 - Staging; **OR**
 - Restaging; **OR**
 - Treatment planning for 177-lutetium Lu Dotatate; **OR**
- ◆ **Positron emission tomography (PET) scan for non-oncologic conditions** is considered appropriate if **ALL** of the following are **TRUE**⁵⁹⁻⁶⁰:
 - MRI or CT are contraindicated or inconclusive; **AND**
 - **ANY** of the following is **TRUE**:

- For suspected musculoskeletal osteomyelitis, when MRI cannot be performed and CT is nondiagnostic; **OR**
- Biopsy-proven Castleman Disease⁶⁷; **OR**
- Fever of unknown origin (FUO) after clinical (including labs and blood cultures) and other advanced imaging workup (CT or MR) are negative; **OR**
- Sarcoid when conventional testing (i.e., CT and inflammatory serology) are inconclusive to evaluate **ANY** of the following⁸²⁻⁸⁴:
 - ◆ Extent of disease; **OR**
 - ◆ Response to treatment, provided that the results will affect a change in management; **OR**
 - ◆ If sarcoid is suspected and there is a need for PET/CT to determine the most suitable site to biopsy; **OR**
- Known or suspected systemic vasculitis (e.g., aortitis, giant cell arteritis, Takayasu arteritis).⁷³⁻⁷⁷

Non-Indications

→ **Positron emission tomography (PET), with or without concurrently acquired computed tomography (CT)(PET/CT)** is not considered appropriate if **ANY** of the following is **TRUE**:

- ◆ The patient has undergone advanced imaging of the same body part within 3 months without undergoing treatment or developing new or worsening symptoms⁶¹; **OR**
- ◆ **ANY** of the following:
 - Used as an initial screening test in asymptomatic individuals; **OR**
 - Whole-body PET or PET/CT for cancer screening purposes only; **OR**

- Initial diagnosis or staging of axillary lymph nodes in breast cancer^{1,9-12}; **OR**
- Initial diagnosis of cervical cancer related to anti-tumor treatment strategy^{1,13-14}; **OR**
- Initial staging of regional lymph nodes in melanoma^{1,32}; **OR**
- Non-seminoma tumors of the testes⁴⁸⁻⁴⁹; **OR**
- Surveillance after definitive treatment of anal carcinoma⁵; **OR**
- Surveillance after definitive treatment of Hodgkin lymphoma³⁰; **OR**
- Active surveillance of very-low risk prostate cancer (i.e., actively monitoring the course of disease with the expectation to intervene with curative intent if the cancer progresses)⁴⁰; **OR**
- FDG-PET for the staging of prostate cancer.⁴⁰⁻⁴⁴

*NOTE: PET/CT in patients with claustrophobia should be requested at the discretion of the ordering provider.

**NOTE: PET/CT in pregnant patients should be requested at the discretion of the ordering provider and obstetric care provider.⁵⁴

***NOTE: PET scans should be scheduled at least 4–6 weeks after radiation therapy or surgery to avoid false positives due to inflammation from recent treatments.

Disclaimer on Radiation Exposure in Pediatric Population

Due to the heightened sensitivity of pediatric patients to ionizing radiation, minimizing exposure is paramount. At Cohere, we are dedicated to ensuring that every patient, including the pediatric population, has access to appropriate imaging following accepted guidelines. Radiation risk is dependent mainly on the patient's age at exposure, the organs exposed, and

the patient's sex, though there are other variables. The following technical guidelines are provided to ensure safe and effective imaging practices:

Radiation Dose Optimization: Adhere to the lowest effective dose principle for pediatric imaging. Ensure that imaging protocols are specifically tailored for pediatric patients to limit radiation exposure. [55-56](#)

Alternative Modalities: Prioritize non-ionizing imaging options such as ultrasound or MRI when clinically feasible, as they are less likely to expose the patient to ionizing radiation. For instance, MRI or ultrasound should be considered if they are more likely to provide an accurate diagnosis than CT, fluoroscopy, or radiography. [55-56](#)

Cumulative Dose Monitoring: Implement systems to track cumulative radiation exposure in pediatric patients, particularly for those requiring multiple imaging studies. Regularly reassess the necessity of repeat imaging based on clinical evaluation. [55-56](#)

CT Imaging Considerations: When CT is deemed the best method for achieving a correct diagnosis, use the lowest possible radiation dose that still yields reliable diagnostic images. [55-56](#)

Cohere Imaging Gently Guideline

The purpose of this guideline is to act as a potential override when clinically indicated to adhere to Imaging Gently and Imaging Wisely guidelines and As Low As Reasonably Possible (ALARA) principles.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
78811	Positron emission tomography (PET) imaging of chest
78812	Positron emission tomography (PET) imaging of skull base to midthigh
78813	Positron emission tomography (PET) imaging of whole body
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT)
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging of skull base to midthigh
78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) of whole body
79101	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body
A9515	Choline c-11, diagnostic, per study dose up to 20 millicuries
A9552	Fluorodeoxyglucose f-18 fdg, diagnostic, per study dose, up to 45 millicuries
A9587	Gallium ga-68, dotatate, diagnostic, 0.1 millicurie

A9588	Fluciclovine f-18, diagnostic, 1 millicurie
A9593	Gallium ga-68 psma-11, diagnostic, (ucsf), 1 millicurie
A9594	Gallium ga-68 psma-11, diagnostic, (ucla), 1 millicurie
A9595	Piflufolastat f-18, diagnostic, 1 millicurie
A9596	Gallium ga-68 gozetotide, diagnostic, (illuccix), 1 millicurie
A9597	Positron emission tomography radiopharmaceutical, diagnostic, for tumor identification, not otherwise classified
A9607	Lutetium Lu 177 vipivotide tetraxetan, therapeutic, 1 millicurie
A9608	Flotufolastat f18, diagnostic, 1 millicurie
A9609	Fludeoxyglucose f18 up to 15 millicuries
A9800	Gallium Ga-68 gozetotide, diagnostic, (Locametz), 1 millicurie
G0219	PET imaging whole body; melanoma for non-covered indications
G0235	PET imaging, any site, not otherwise specified
G0252	PET imaging, full and partial-ring scanners only, for initial diagnosis of breast cancer and/or surgical planning for breast cancer (e.g., initial staging of axillary

	lymph nodes)
--	--------------

Medical Evidence

Jadvar et al. (2017) published Appropriate Use Criteria for the Society of Nuclear Medicine and Molecular Imaging (SNMMI), the European Association of Nuclear Medicine (EANM), the American Society of Clinical Oncology (ASCO), the American College of Nuclear Medicine (ACNM) the Society for Pediatric Radiology (SPR), and the Canadian Association of Nuclear Medicine (CANM). The group focused on meta-analyses and large individual studies comparing PET or PET/CT with other imaging modalities. It stated that the physician must prioritize which modality to begin with. PET/CT is said to have a strong role in restaging cancers and determining future patient management. Clinical studies cited to support the accuracy of PET/CT in detecting recurrent disease and assessing treatment response.³

The American College of Radiology (ACR) published the ACR-ACNM-SNMMI-SPR practice parameter for performing FDG-PET/CT in oncology in 2021. The indications presented in the document include use in the staging of malignancy, monitoring response to therapy, or restaging when the patient has relapsed. Additionally, this imaging modality may help localize the site of the primary tumor in the setting of metastatic disease, clarify indeterminate results, or localize occult disease when testing such as tumor markers indicates neoplastic disease. Finally, FDG-PET/CT may be used to plan treatment goals and to guide biopsy and radiation treatment planning.²

Published by the American College of Radiology in 2023, the ACR-ACNM-SNMMI practice parameter for performing Gallium-68 and Copper-64 Dotatate PET/CT imaging for neuroendocrine tumors (NETs). This imaging modality is appropriate for diagnosing, staging, restaging, and assessing treatment response in neuroendocrine tumors. Radiotracers such as those discussed in this practice parameter, which target cell membrane expression of somatostatin receptors (SSTRs), are useful in evaluating

well-differentiated NETs compared to anatomical imaging. Fused imaging with computed tomography (PET/CT) in hybrid PET scanners has shown a high level of accuracy in evaluating patients with known or suspected malignancy.⁵³

References

1. Centers for Medicare & Medicaid Services (CMS). National coverage determination (NCD): Positron emission tomography (FDG) for oncologic indications (220.6.17). Effective June 11, 2013. Accessed July 24, 2024.
<https://www.cms.gov/medicare-coverage-database/search.aspx>.
2. American College of Radiology (ACR). ACR-ACNM-SNMMI-SPR practice parameter for the performing FDG-PET/CT in oncology (resolution 20). Published 2021. Accessed July 24, 2024.
<https://www.acr.org/-/media/ACR/Files/Practice-Parameters/FDG-PET-CT.pdf>.
3. Jadvar H, Coletti PM, Delgado-Bolton R, et al. Appropriate use criteria for FDG PET/CT in restaging and treatment response after assessment of malignant disease. *J Nucl Med*. 2017 Dec;58(12):2026–2037. doi: 10.2967/jnumed.117.197988. PMID: 29025980.
4. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Neuroendocrine and adrenal tumors (ver 1.2025). Published January 17, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/neuroendocrine.pdf.
5. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Anal carcinoma (ver 1.2025). Updated January 17, 2025.. Accessed February 5, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/anal.pdf.
6. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Bladder carcinoma (ver 1.2025). Updated January 17, 2025.. Accessed February 5, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/bladder.pdf.

7. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Bone cancer (ver. 8.2024). Updated August 20, 2024. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/bone.pdf.
8. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Central nervous system cancers (ver. 1.2025). Updated January 21, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/cns.pdf.
9. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Breast cancer (ver. 1.2025). Updated January 31, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf.
10. Expert Panel on Breast Imaging, McDonald ES, Scheel JR, et al. ACR appropriateness criteria – imaging of invasive breast cancer. Published 2023. Accessed February 20, 2024.
<https://acsearch.acr.org/docs/3186697/Narrative>.
11. Expert Panel on Breast Imaging, Le-Petross HT, Slanetz PJ, et al. ACR appropriateness criteria – imaging of the axilla. *J Am Coll Radiol*. 2022 May;19(5S):S87–S113. doi: 10.1016/j.jacr.2022.02.010. PMID: 35550807.
12. Expert Panel on Breast Imaging, Hayward JH, Linden OE, et al. ACR appropriateness criteria – monitoring response to neoadjuvant systemic therapy for breast cancer: 2022 update. *J Am Coll Radiol*. 2023 May;20(5S):S125–S145. doi: 10.1016/j.jacr.2023.02.016. PMID: 37236739.
13. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Cervical cancer (ver. 1.2025). Updated January 31, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf.
14. Expert Panel on GYN and OB Imaging, Shinagare AB, Burk KS, et al. ACR appropriateness criteria – pretreatment evaluation and follow-up of invasive cancer of the cervix: 2023 update. *J Am Coll Radiol*. 2024 Jun;21(6S):S249–S267. doi: 10.1016/j.jacr.2024.02.026. PMID: 38823948.

15. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Colon cancer (ver. 1.2025). Updated January 17, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf.
16. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Rectal cancer (ver. 1.2025). Updated January 17, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf.
17. Expert Panel on Gastrointestinal Imaging, Korngold EK, Moreno C, et al. ACR appropriateness criteria – staging of colorectal cancer: 2021 update. *J Am Coll Radiol*. 2022 May;19(5S):S208–S222. doi: 10.1016/j.jacr.2022.02.012. PMID: 35550803.
18. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Uterine neoplasms (ver. 1.2025). Updated January 31, 2025.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf.
19. Expert Panel on GYN and OB Imaging, Reinhold C, Ueno Y, et al. ACR appropriateness criteria – pretreatment evaluation and follow-up of endometrial cancer. *J Am Coll Radiol*. 2020 Nov;17(11S):S472–S486. doi: 10.1016/j.jacr.2020.09.001. PMID: 33153558.
20. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Esophageal and esophagogastric junction cancers (ver. 12.2024). Updated December 20, 2024. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/esophageal.pdf
21. Expert Panels on Thoracic and Gastrointestinal Imaging, Raptis CA, Goldstein A, et al. ACR appropriateness criteria – staging and follow-up of esophageal cancer. *J Am Coll Radiol*. 2022 Nov;19(11S):S462–S472. doi: 10.1016/j.jacr.2022.09.008. PMID: 36436970.
22. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Gastric cancer (ver. 12.2024). Updated

December 20, 2024. Accessed February 5, 2025..

https://www.nccn.org/professionals/physician_gls/pdf/gastric.pdf.

23. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Gestational trophoblastic neoplasia (ver. 1.2025). Updated January 31, 2025.. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/gtn.pdf.
24. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Head and neck cancers (ver. 1.2025). Updated January 17, 2025. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf.
25. Expert Panel on Neurological Imaging, Gule-Monroe MK, Calle S, et al. ACR appropriateness criteria – staging and post-therapy assessment of head and neck cancer. *J Am Coll Radiol*. 2023 Nov;20(11S):S521–S564. doi: 10.1016/j.jacr.2023.08.008. PMID: 38040469.
26. Expert Panel on Neurologic Imaging, Aulino JM, Kirsch CFE, et al. ACR appropriateness criteria – neck mass adenopathy. *J Am Coll Radiol*. 2019 May;16(5S):S150–S160. doi: 10.1016/j.jacr.2019.02.025. PMID: 31054741.
27. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Non-small cell lung cancer (ver. 1.2025). Updated January 14, 2025.. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf.
28. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Small cell lung cancer (ver. 1.2025). Updated January 13, 2025.. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/sclc.pdf.
29. Expert Panel on Thoracic Imaging, de Groot PM, Chung JH, et al. ACR appropriateness criteria – noninvasive clinical staging of primary lung cancer. *J Am Coll Radiol*. 2019 May;16(5S):S184–S195. doi: 10.1016/j.jacr.2019.02.008. PMID: 31054745.
30. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Hodgkin lymphoma (ver. 2.2025).

- Updated January 30, 2025. Accessed February 5, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/hodgkins.pdf.
31. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: T-cell lymphomas (ver. 11.2024). Updated November 11, 2024. Accessed February 5, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/t-cell.pdf.
32. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Melanoma, cutaneous (ver. 1.2025). Updated January 28, 2025.. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/cutaneous_melanoma.pdf.
33. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Multiple myeloma (ver. 9.2024). Updated September 17, 2024. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/myeloma.pdf.
34. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Ovarian cancer including fallopian tube cancer and primary peritoneal cancer (ver. 3.2024). Updated July 15, 2024. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf.
35. Expert Panel on Women's Imaging, Pandharipande PV, Lowry KP, et al. ACR appropriateness criteria - ovarian cancer screening. Updated 2017. Accessed July 24, 2024.
<https://acsearch.acr.org/docs/69463/Narrative/>.
36. Expert Panel on Women's Imaging, Kang SK, Reinhold C, et al. ACR appropriateness criteria - staging and follow-up of ovarian cancer. *J Am Coll Radiol*. 2018 May;15(5S):S198-S207. doi: 10.1016/j.jacr.2018.03.015. PMID: 29724422.
37. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Pancreatic adenocarcinoma (ver.

- 2.2024). Updated February 3, 2025. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/pancreatic.pdf.
38. Expert Panel on Gastrointestinal Imaging, Qayyum A, Tamm EP, et al. ACR appropriateness criteria – staging of pancreatic ductal adenocarcinoma. *J Am Coll Radiol*. 2017 Nov;14(11S):S560–S569. doi: 10.1016/j.jacr.2017.08.050. PMID: 29101993.
39. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Mesothelioma, pleural (ver. 1.2025). Updated January 14, 2025. Accessed February 6, 2025..
https://www.nccn.org/professionals/physician_gls/pdf/meso_pleural.pdf.
40. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Prostate cancer (ver. 12.2024). Updated December 4, 2024. Accessed February 6, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf.
41. American College of Radiology (ACR), American College of Nuclear Medicine (ACNM). ACR–ACNM practice parameter for the performance of fluorine-18 fluciclovine PET/CT for recurrent prostate cancer (resolution 30). Updated 2018. Accessed July 24, 2024.
<https://www.acr.org/-/media/ACR/Files/Practice-Parameters/PET-CT-ProstateCancer.pdf>.
42. Expert Panel on Urological Imaging, Akin O, Woo S, et al. ACR appropriateness criteria – pre-treatment detection, surveillance, and staging of prostate cancer. Updated 2022. Accessed February 5, 2024.
<https://acsearch.acr.org/docs/69371/Narrative/>.
43. Expert Panel on Urologic Imaging, Turkbey B, Oto A, et al. ACR appropriateness criteria – post-treatment follow-up of prostate cancer. Updated 2022. Accessed July 24, 2024.
<https://acsearch.acr.org/docs/69369/Narrative/>.
44. Shen K, Liu B, Zhou X, et al. The evolving role of ¹⁸F-FDG PET/CT in diagnosis and prognosis prediction in progressive prostate cancer.

Front. Oncol. 2021 Jul 29;11:683793. doi: 10.3389/fonc.2021.683793. PMID: 34395251; PMCID: PMC8358601.

45. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Squamous cell skin cancer (ver. 1.2025). Updated January 17, 2025. Accessed February 6, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/squamous.pdf.
46. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Soft tissue sarcoma (ver. 1.2024). Updated November 21, 2024.. Accessed February 5, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/sarcoma.pdf.
47. Expert Panel on Musculoskeletal Imaging, Garner HW, Wessell DE, et al. ACR appropriateness criteria – soft tissue masses: 2022 update. *J Am Coll Radiol.* 2023 May;20(5S):S234–S245. doi: 10.1016/j.jacr.2023.02.009. PMID: 37236746.
48. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Testicular cancer (ver. 1.2025). Updated January 17, 2025. Accessed February 6, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/testicular.pdf.
49. Expert Panel on Urological Imaging, Schieda N, Oto A, et al. ACR appropriateness criteria – staging and surveillance of testicular cancer: 2021 update. *J Am Coll Radiol.* 2022 May;19(5S):S194–S207. doi: 10.1016/j.jacr.2022.02.009. PMID: 35550802.
50. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Thyroid carcinoma (ver. 1.2025). Updated January 15, 2025. Accessed February 6, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/thyroid.pdf.
51. Expert Panel on Neurological Imaging, Zander D, Bunch PM, et al. ACR appropriateness criteria – parathyroid adenoma. *J Am Coll Radiol.* 2021 Nov;18(11S):S406–S422. doi: 10.1016/j.jacr.2021.08.013. PMID: 34794597.
52. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Vulvar cancer (ver. 4.2024). Updated

May 1, 2024. Accessed February 6, 2025.

https://www.nccn.org/professionals/physician_gls/pdf/vulvar.pdf.

53. American College of Radiology (ACR), American College of Nuclear Medicine (ACNM), Society of Nuclear Medicine and Molecular Imaging (SNMMI). ACR-ACNM-SNMMI practice parameter for the performance of Gallium-68 and Copper-64 Dotatate PET/CT imaging for neuroendocrine tumors. *Clin Nucl Med*. 2018 Dec;43(12):899-908. doi: 10.1097/RLU.0000000000002309. PMID: 30394933.
54. American College of Radiology (ACR), Society for Pediatric Radiology (SPR). ACR-SPR practice parameter for imaging pregnant or potentially pregnant patients with ionizing radiation- resolution 31. Updated 2023. Accessed March 1, 2024.
<https://www.acr.org/-/media/acr/files/practice-parameters/pregnant-pts.pdf>.
55. The Image Gently Alliance. Procedures - image gentle and CT scans. Updated 2014. Accessed July 24, 2024.
<https://www.imagegently.org/Procedures/Computed-Tomography>.
56. National Cancer Institute. Radiation risks and pediatric computed tomography (CT): A guide for health care. Updated September 4, 2018. Accessed July 24, 2024.
<https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/pediatric-ct-scans>.
57. Centers for Medicare and Medicaid Services (CMS). Billing and coding: Positron emission tomography (PET) scan for inflammation and infection (A59318). Effective Date November 22, 2023. Accessed July 31, 2024.
<https://www.cms.gov/medicare-coverage-database/search.aspx>.
58. Culver DA, Aryal S, Barney J, et al. Efzofitimod for the treatment of pulmonary sarcoidosis. *Chest*. 2023 Apr;163(4):881-890. doi: 10.1016/j.chest.2022.10.037. PMID: 36356657; PMCID: PMC10258437.
59. Pierce JL, Perry MT, Wessell DE, et al. ACR Appropriateness Criteria. Suspected osteomyelitis, septic arthritis, or soft tissue infection

(excluding spine and diabetic foot). Revised 2022. <https://acsearch.acr.org/docs/3094201/Narrative/>

60. Palestro CJ, Abikhzer G, Bar-Sever Z, et al. Society of Nuclear Medicine and Molecular Imaging. Appropriate use criteria for the use of nuclear medicine in fever of unknown origin. Published 2023. <https://snmmi.org/Web/Clinical-Practice/Appropriate-Use-Criteria/Articles/Appropriate-Use-Criteria-for-the-Use-of-Nuclear-Medicine-in-Fever-of-Unknown-Origin>
61. Wasser EJ, Prevedello LM, Sodickson A, Mar W, Khorasani R. Impact of a real-time computerized duplicate alert system on the utilization of computed tomography. *JAMA Intern Med.* 2013;173(11):1024-1026. doi: 10.1001/jamainternmed.2013.543. PMID: 23609029.
62. Gould MK, Donington J, Lynch WR, et al. Evaluation of individuals with pulmonary nodules: when is it lung cancer? *Chest.* 2013;143(5):e93S-e120S. <http://journal.publications.chestnet.org>.
63. Tan C, Barrington S, Rankin S, et al. Role of integrated 18-fluorodeoxyglucose positron emission tomography-computed tomography in patients surveillance after multimodality therapy of malignant pleural mesothelioma. *Journal of Thoracic Oncology.* 2010 Mar 1;5(3):385-8.
64. Elliott HS, Metser U, De Perrot M, et al. 18F-FDG PET/CT in the management of patients with malignant pleural mesothelioma being considered for multimodality therapy: experience of a tertiary referral center. *The British journal of radiology.* 2018 Jun 1;91(1086):20170814.
65. Katz SI, Straus CM, Roshkovan L, et al. Considerations for imaging of malignant pleural mesothelioma: a consensus statement from the international mesothelioma interest group. *Journal of Thoracic Oncology.* 2023 Mar 1;18(3):278-98.
66. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Mesothelioma, peritoneal (ver. 2.2025). Updated January 14, 2025. Accessed February 18, 2025.

https://www.nccn.org/professionals/physician_gls/pdf/meso_peritoneal.pdf#page=5

67. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology: Castleman disease (ver. 2.2025). Updated January 28, 2025. Accessed February 18, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/castleman.pdf#page=7
68. Marulli G, Battistella L, Mammana M, Calabrese F, Rea F. Superior sulcus tumors (Pancoast tumors). *Annals of translational medicine*. 2016 Jun;4(12). PMID: 27429965
69. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology: Melanoma: Uveal (ver 1.2025). Updated February 11, 2025. Accessed February 18, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/uveal.pdf#page=11
70. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology: Acute Lymphoblastic Leukemia (ver 3.2024) Updated December 20, 2024. Accessed February 20, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/all.pdf#page=13
71. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology: Acute Myeloid Leukemia (ver 2.2025). Updated January 27, 2025. Accessed February 20, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/aml.pdf#page=12
72. National Comprehensive Cancer Network (NCCN). NCCN Clinical practice guidelines in oncology: Chronic Lymphocytic Leukemia/ Small Lymphocytic Lymphoma (ver 2.2025). Updated February 7, 2025. Accessed February 20, 2025.
https://www.nccn.org/professionals/physician_gls/pdf/cll.pdf#page=10

73. Ben Shimol J, Amital H, Lidar M, et al. The utility of PET/CT in large vessel vasculitis. *Scientific reports*. 2020 Oct 19;10(1):17709.
74. Slart RH, Nienhuis PH, Glaudemans AW, et al. Role of 18F-FDG PET/CT in large vessel vasculitis and polymyalgia rheumatica. *Journal of Nuclear Medicine*. 2023 Apr 1;64(4):515–21.
75. Isselbacher EM, Preventza O, Hamilton Black III J, et al. 2022 ACC/AHA guideline for the diagnosis and management of aortic disease: a report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. *Journal of the American College of Cardiology*. 2022 Dec 13;80(24):e223–393.
76. Saadoun D, Vautier M, Cacoub P. Medium-and large-vessel vasculitis. *Circulation*. 2021 Jan 19;143(3):267–82.
77. Chen Z, Zhao Y, Wang Q, et al. Imaging features of 18F-FDG PET/CT in different types of systemic vasculitis. *Clinical rheumatology*. 2022 May;41(5):1499–509.
78. Galldiks N, Albert NL, Wollring M, et al. Advances in PET imaging for meningioma patients. *Neuro-oncology advances*. 2023 May 1;5(Supplement_1):i84–93.
79. Mahase SS, Roth O'Brien DA, No D, et al. [68Ga]-DOTATATE PET/MRI as an adjunct imaging modality for radiation treatment planning of meningiomas. *Neuro-oncology advances*. 2021 Jan 1;3(1):vdab012.
80. Prasad RN, Perlow HK, Bovi J, et al. 68Ga-DOTATATE PET: the future of meningioma treatment. *International Journal of Radiation Oncology, Biology, Physics*. 2022 Jul 15;113(4):868–71.
81. Grossbach AJ, Mahaney KB, Menezes AH. Pediatric meningiomas: 65-year experience at a single institution. *Journal of Neurosurgery: Pediatrics*. 2017 May 5;20(1):42–50.
82. Keijsers RGM, Grutters JC. In Which Patients with Sarcoidosis Is FDG PET/CT Indicated? *J Clin Med*. 2020 Mar 24;9(3):890. doi: 10.3390/jcm9030890. PMID: 32213991; PMCID: PMC7141490.

83. Adams H, Keijsers RG, Korenromp IH, Grutters JC. FDG PET for gauging of sarcoid disease activity. *Semin Respir Crit Care Med*. 2014 Jun;35(3):352–61. doi: 10.1055/s-0034-1376866. Epub 2014 Jul 9. PMID: 25007087.
84. Akaike G, Itani M, Shah H, Ahuja J, Yilmaz Gunes B, Assaker R, Behnia F. PET/CT in the Diagnosis and Workup of Sarcoidosis: Focus on Atypical Manifestations. *Radiographics*. 2018 Sep–Oct;38(5):1536–1549. doi: 10.1148/rg.2018180053. Epub 2018 Aug 17. PMID: 30118393.

Clinical Guideline Revision

History/Information

Original Date: April 29, 2022		
Review History		
Version 2	8/15/2024	Annual review and policy restructure.
Version 3	10/30/2024	Edited repeat imaging criteria language.
Version 4	11/21/2024	Added solitary pulmonary nodule verbiage/reference and biopsy-proven language to indications
Version 5	3/13/2025	<ul style="list-style-type: none"> Separated and revised surveillance criteria into new standalone indication based on NCCN guidance. Separated and revised initial diagnosis criteria into new standalone indication based on NCCN guidance. Indication for non-oncologic conditions expanded (Castleman Disease, Sarcoid) Substantial copyediting throughout majority of policy for ease of use and clarity in language. Added references.