AAVBC
AMERICAN ACADEMY OF VALUE BASED CARE

Hodgkin's Lymphoma

Quick Reference Guide

2026

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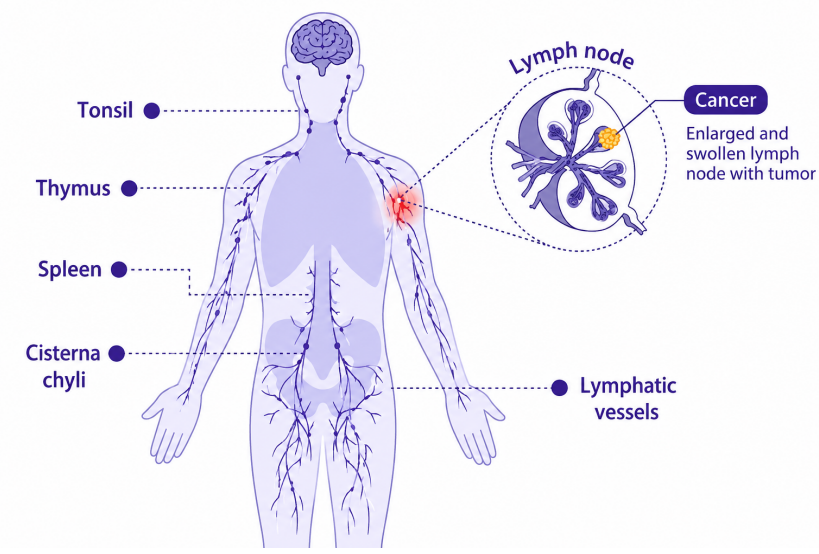
1 CLINICAL SNAPSHOT

Definition: **Hodgkin lymphoma** (**HL**) is a B-cell lymphoid malignancy defined histologically by **scattered malignant Reed-Sternberg cells** (large binucleated cells with 'owl-eye' nucleoli) within a reactive inflammatory background.[1–3] Two biologically and therapeutically distinct HL subtypes include **classical HL (cHL)** (**>90%**[1] of cases) and **nodular lymphocyte-predominant HL (NLPHL)**, an indolent CD20-positive form managed differently.[1,2] Classical HL is further divided into **nodular sclerosis** (**NSHL**, ~**70%** of cHL, more common in younger adults), **mixed cellularity** (MCHL, ~**20-25%**, the subtype more common in older and HIV-positive patients and frequently EBV-positive), **lymphocyte-rich**, and **lymphocyte-depleted** subtypes.[1–3] The subtype axis carries real clinical weight and **is not interchangeable**: NLPHL and cHL differ in immunophenotype, treatment, and prognosis.[2,3]

ICD-10 Codes:

HL is reported under category **C81**, which requires **three documentation axes** for full specificity:[4,5] (**1**) histologic subtype (4th character), (**2**) anatomic site (5th character), and (**3**) disease status, active vs. in remission. Subtype codes are **C81.0x** (nodular lymphocyte predominant), **C81.1x** (nodular sclerosis), **C81.2x** (mixed cellularity), **C81.3x** (lymphocyte depleted), **C81.4x** (lymphocyte-rich), **C81.7x** (other), and **C81.9x** (unspecified, use only when subtype is genuinely unknown after pathology review).[4,5] The **5th character** specifies site (e.g., .x1 head/face/neck, .x2 intrathoracic, .x8 multiple sites, .x9 extranodal/solid organ), and the **A suffix** (e.g., **C81.1A**) denotes oncologist-documented remission.[4,5] **Z85.71** (personal history of Hodgkin lymphoma) carries no HCC value and should be used only when oncology has **definitively closed active surveillance**. Common co-managed conditions are **coded separately**: **I25.10** (atherosclerotic heart disease), **I50.-** (heart failure), **J44.-** (COPD), **J84.-** (interstitial lung disease), **E11.42/G63** (diabetic/other neuropathy), **N18.-** (CKD stage), and R-codes for frailty components (**R54** debility, **R26.-** gait abnormality, **R63.4** weight loss).[4,5]

Lymphomas are cancers of the lymph nodes



Prevalence and Burden: HL is uncommon, with the American Cancer Society estimating approximately **8,920** new US cases and roughly **900 deaths** in 2026.[6] Its hallmark is a **bimodal age distribution**, with incidence peaks at ages **20-30** and again at **50-70** years.[2,3] This second peak is the clinically underappreciated, **Medicare-relevant population**: older adults account for

an estimated **20-25%** of new diagnoses and more often present with mixed cellularity histology, EBV-positive disease, B symptoms, and advanced stage.[2,3,7] HL is among the **most curable cancers**, with overall 5-year survival of about **89-95%** and exceeding **90%** for early-stage disease,[2,3] but **in patients over age 60**, 'curable' carries a real hazard: treatment-related mortality reaches **5-9%** with standard ABVD, versus about **0.3%** in younger patients.[7–9]

HCC/RAF V28 Mapping

ICD-10 CODE(S)[4]	HCC CATEGORY (V28)[10]	RAF (CNA)*[11]	DOCUMENTATION REQUIREMENT[4,5]
C81.10–C81.19 Nodular sclerosis cHL	**HCC 21** Lymphoma and Other Cancers	0.671	**Specify**: subtype, nodal site(s), Lugano stage, B-symptom status; state "lymphoma," not "lymphadenopathy"
C81.20–C81.29 Mixed cellularity cHL	**HCC 21** Lymphoma and Other Cancers	0.671	Most common subtype at Medicare age; **document**: subtype, site, stage, active status, and EBV status if known
C81.00–C81.09 NLPHL	**HCC 21** Lymphoma and Other Cancers	0.671	**Clinically distinct from cHL** (CD20+); **document**: immunophenotype and treatment status
C81.30–C81.39 Lymphocyte-depleted cHL	**HCC 21** Lymphoma and Other Cancers	0.671	**Rarest subtype**; associated with HIV/immunosuppression; **document**: subtype and immunodeficiency status
C81.40–C81.49 Lymphocyte-rich cHL	**HCC 21** Lymphoma and Other Cancers	0.671	~5% of cHL; **document**: subtype and site
C81.xA (any subtype), in remission	**HCC 21** Lymphoma and Other Cancers	0.671	Requires **oncologist-documented remission**; use while under active surveillance
C81.90–C81.99 HL, unspecified	**HCC 21** Lymphoma and Other Cancers	0.671	**AVOID** if pathology specifies subtype; query oncology/pathology record; audit risk
Z85.71 Personal history of HL	No HCC	-	**AVOID** for active disease: use ONLY after oncology confirms no active disease and closes surveillance

ABBREVIATIONS: cHL = classical Hodgkin lymphoma; HCC = Hierarchical Condition Category; CMS-HCC V28 = CMS Hierarchical Condition Category Model, Version 28; RAF = Risk Adjustment Factor; CNA = Community Non-Dual Eligible, Aged segment; NLPHL = nodular lymphocyte-predominant Hodgkin lymphoma; EBV = Epstein-Barr virus; HIV = human immunodeficiency virus; ICD-10-CM = International Classification of Diseases, 10th Revision, Clinical Modification; CMS = Centers for Medicare & Medicaid Services; MA = Medicare Advantage

***RAF values represent the Community Non-Dual Eligible Aged (CNA) coefficient from the 2026 CMS-HCC model;[11] values vary across patient populations based on eligibility and care setting**

Risk-Adjusted Care Resources per Patient/Year[10,11]
Risk-adjusted care resource allocation — MA base rate (~$10,402.34) × RAF coefficient

HODGKIN LYMPHOMA
$7.0K
HCC 21 · RAF 0.671

AAVBC PERSPECTIVE

From the AAVBC's perspective,value-based care in Hodgkin lymphoma *requires replacing the traditional "wait-and-see" approach with* ***accountable diagnostic stewardship*** *that prioritizes rapid tissue diagnosis, particularly in older adults where delayed recognition is common and* ***the likelihood of malignancy is substantially higher****.*[3,7,12] *Persistent localized lymphadenopathy with any* ***unexplained B symptom*** *(fever, drenching night sweats, unintentional weight loss >10% over 6 months) lasting >2–4 weeks should trigger an* ***urgent suspected lymphoma pathway,*** *not empiric antibiotics or prolonged observation, with explicit documentation of "****suspected lymphoma→urgent hematology referral****" and a goal of initiating diagnostic workup* ***within 14 days****.*[12]
PCPs should recognize that definitive diagnosis requires ***excisional lymph node biopsy****,* ***not fine-needle aspiration****, because preservation of tissue architecture is essential to* ***identify Reed-Sternberg cells****; referrals should explicitly request an excisional biopsy whenever feasible.*[1,13] ***The PCP's role extends beyond diagnosis****: survivorship care requires ongoing, treatment-informed monitoring for* ***secondary malignancies*** *and* ***late cardiovascular and pulmonary toxicities*** *based on each survivor's therapeutic exposures, ensuring that long-term risk management remains integrated within primary care rather than deferred entirely to oncology.*[1,14]

2 RECOGNITION AND DIAGNOSIS

Medicare Screenings and Surveillance (Adult and Geriatric)

There is no HL-specific population-wide screening test; workup begins once clinical suspicion is established.[1] Coverage applies to diagnostic and staging workup, not screening. **Medicare Part B covers the following diagnostic tests and workup** when medically necessary:

Diagnostic Tests Covered Under Medicare Part B

TEST	FREQUENCY	CPT/HCPCS	CLINICAL INDICATION[1,15,16]
Excisional lymph node biopsy	**At diagnosis**; the diagnostic standard	38500/ 38510/38525	**Suspected HL**; FNA alone is insufficient for diagnosis
Core needle biopsy of lymph node	**At diagnosis**; anatomically inaccessible nodes only, with expert pathology review	38505	**Not equivalent to excisional biopsy** for HL diagnosis; acceptable if diagnostic with adequate tissue
CBC with differential	**At diagnosis**; per treatment cycle	85025	**Essential baseline workup**; monitor for cytopenias during therapy
Comprehensive metabolic panel (CMP)	**At diagnosis**; per treatment cycle	80053	Baseline organ function; includes LDH and LFTs
Erythrocyte sedimentation rate (ESR)	**At diagnosis**	85652	Prognostic factor for **risk stratification** (unfavorable if elevated)
HIV testing	**At diagnosis**	87389/86703	**Essential per NCCN**; guides treatment considerations
FDG-PET/CT, skull base to mid-thigh†	**Initial staging**; interim restaging (after 2 cycles); **end-of-treatment** response assessment	78815/78816	Staging, restaging, and response assessment of lymphoma; routine surveillance PET after confirmed CR is **not recommended**
CT chest/abdomen/pelvis with contrast	**Staging**; surveillance per follow-up schedule	74177/71260	**Diagnostic CT when RT is planned**; surveillance CT no more than every 6 mo for up to 2 yr post-treatment, then as clinically indicated
Chest x-ray (PA and lateral)	**At diagnosis** (encouraged, especially if large mediastinal mass)	71046	Assess mediastinal mass ratio; **does not replace cross-sectional imaging**

TEST	FREQUENCY	CPT/HCPCS	CLINICAL INDICATION[1,15,16]
Echocardiogram (TTE with Doppler)	**Before** anthracycline-based therapy; **post-treatment** surveillance per risk	93306	**Baseline LVEF guides regimen selection**; NCCN recommends baseline 2D echo pre-anthracycline
Pulmonary function tests with DLCO	**Before** bleomycin-containing therapy (e.g., ABVD)	94010/94729	**DLCO threshold ≥60%** informs **bleomycin eligibility**
Bone marrow biopsy and aspiration	Only if unexplained cytopenias and negative FDG-PET	38222	**No longer routinely indicated** when PET/CT is performed; PET detects focal marrow infiltration
Advance Care Planning (AWV)‡	**Annually** + when goals change	99497/99498	**Document**: directives, surrogate, code status; relevant when comorbidities or advanced age shape treatment intensity decisions

ABBREVIATIONS: HL = Hodgkin lymphoma; FNA = fine-needle aspiration; CPT/HCPCS = Current Procedural Terminology/Healthcare Common Procedure Coding System; CBC = complete blood count; CMP = comprehensive metabolic panel; LDH = lactate dehydrogenase; LFTs = liver function tests; ESR = erythrocyte sedimentation rate; HIV = human immunodeficiency virus; NCCN = National Comprehensive Cancer Network; FDG-PET/CT = fluorodeoxyglucose-positron emission tomography/computed tomography; CR = complete remission; CT = computed tomography; RT = radiation therapy; PA = posteroanterior; TTE = transthoracic echocardiogram; LVEF = left ventricular ejection fraction; 2D = two-dimensional; DLCO = diffusing capacity of the lungs for carbon monoxide; ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; PET/CT = positron emission tomography/computed tomography; AWV = Annual Wellness Visit; ACP = advance care planning; CMS = Centers for Medicare & Medicaid Services; NCD = National Coverage Determination; LCD = Local Coverage Determination

† CMS covers FDG-PET for staging, restaging, and treatment monitoring of lymphoma under NCD 220.6 Coverage includes up to 3 post-therapy PET/CT scans per patient per tumor type; additional scans require LCD-level medical necessity justification

‡ ACP is covered with no patient copay when performed during the AWV; 99497 covers the first 30 minutes, 99498 each additional 30 minutes

CLINICAL PEARL: PET-FIRST STRATEGY ELIMINATES LOW-YIELD PROCEDURES AND GUIDES TREATMENT INTENSITY

In Hodgkin lymphoma, **FDG-PET/CT is the single highest-value test**: it stages disease, eliminates bone marrow biopsy, and drives response-adapted treatment decisions.[1,15] PET has a negative predictive value of **99.9% for marrow involvement**; in 832 patients across **GHSG trials HD16–HD18**, no patient would have been reclassified based on biopsy alone.[17] The **Lugano Classification** and **NCCN guidelines** both endorse omitting marrow biopsy when PET/CT is performed.[1,15] After 2 cycles, interim PET using the **Deauville 5-point scale** determines whether treatment can be de-escalated (e.g., omitting bleomycin or radiation in PET-negative patients per **RATHL/RAPID**) or must be escalated.[1,18] **The sequence**: staging PET (replaces biopsy) → interim PET (guides de-/escalation) → end-of-treatment PET (confirms remission) ensures each additional procedure or therapy cycle is **reserved for patients with demonstrated need**, reducing low-yield biopsies, excess toxicity, and downstream utilization.[1,3,19]

Subtle Early Signs in Older Adults (>65)

SIGN/SYMPTOM[1,3,12,20]	CLINICAL SIGNIFICANCE[1,3,12,20]
Persistent painless lymphadenopathy >2–4 weeks (cervical/supraclavicular); firm, non-tender, >2 cm	**Most common HL presentation**; supraclavicular location and age >40 are independent risk factors for malignancy → excisional biopsy, **not empiric antibiotics**
Unexplained drenching night sweats	**Classified as a B symptom with prognostic significance**; a single severe B symptom warrants **expedited hematology-oncology referral** even without palpable nodes
Unexplained fever >38°C without identified infection	In FUO with lymphadenopathy, age >45, LDH >250 U/L, and absence of rash are independent risk factors for lymphoma on biopsy → **pursue lymph node biopsy early**
Unintentional weight loss >10% over 6 months	**Classified as a B symptom**; in older adults often misattributed to frailty, depression, or poor nutrition → document and pair with CT imaging and urgent referral
Mixed cellularity histology/EBV-positive disease	**Predominant subtype in the second incidence peak** (age **50–70**); EBV positivity is associated with older age, infradiaphragmatic disease, and poorer prognosis → do not exclude HL by age
Pruritus, fatigue, or alcohol-induced pain at nodal sites	Not classified as B symptoms but are recognized **HL-associated findings**; should prompt **lymph node examination** and further workup if lymphadenopathy is present

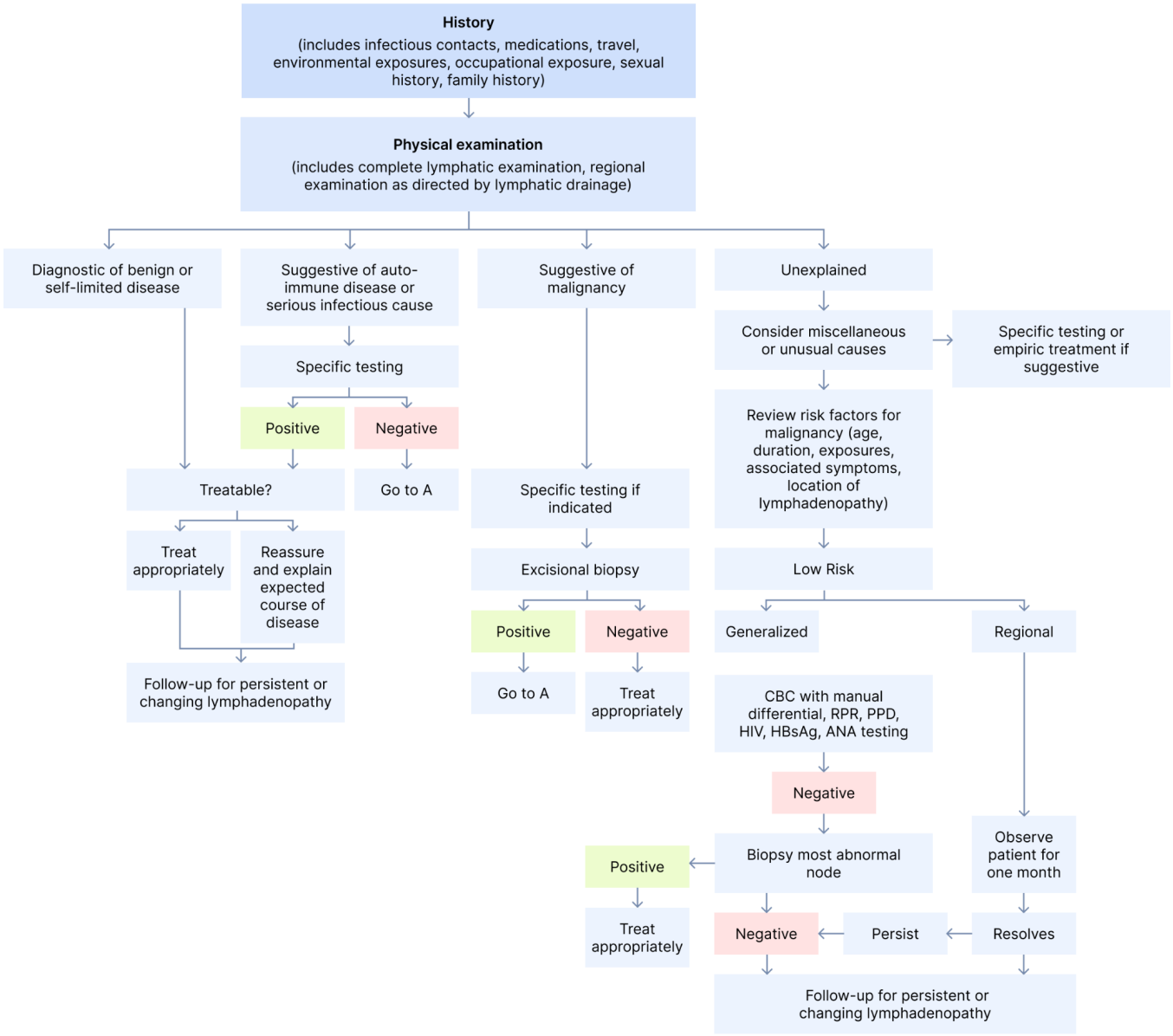
ABBREVIATIONS: HL = Hodgkin lymphoma; B symptoms = fever >38°C, drenching night sweats, or weight loss >10% in 6 months; LDH = lactate dehydrogenase; FUO = fever of unknown origin; CT = computed tomography; EBV = Epstein-Barr virus

Geriatric Risk Factors

RISK FACTOR	STATISTICAL SIGNAL	RELEVANCE TO OLDER ADULTS
Tumor EBV positivity	Present in ~**53%** of HIV-negative HL cases[21]	EBV-positive disease is **more common in the older (50-70) peak** and mixed cellularity subtype[2,3]
Prior infectious mononucleosis	**SIR 2.55** (95% CI 1.87–3.40) for HL; risk elevated **up to 2 decades**; association specific to **EBV-positive HL** (RR 4.0, 95% CI 3.4–4.5)[22–24]	**Age-related immune senescence** may compound distant EBV exposure; the IM–HL association is restricted to **EBV-positive tumors**, which predominate in the older (50–70) incidence peak[22–24]
Same-sex sibling with HL	~**10-fold** increased risk; monozygotic twin concordance elevated[2]	Family history strengthens suspicion **regardless of age**[2]
HIV infection	**Significantly increased risk**; advanced stage, unusual sites, poorer outcomes[2]	Maintain heightened vigilance in **immunosuppressed older adults**[2]
Immunosuppression (post-transplant, autoimmune)	**Elevated risk**; associated with EBV-positive disease[3]	Autoimmune conditions (RA, SLE, Sjogren) both raise risk and mimic HL[3,12]
Age ≥60 years	**Second incidence peak**; more EBV-positive, mixed cellularity disease and lower cure rates[3]	The defining **Medicare-relevant risk window**, where outcomes and tolerance are **worse**[3,7]

ABBREVIATIONS: EBV = Epstein-Barr virus; HIV = human immunodeficiency virus; HL = Hodgkin lymphoma; SIR = standardized incidence ratio; CI = confidence interval; RR = relative risk; IM = infectious mononucleosis; RA = rheumatoid arthritis; SLE = systemic lupus erythematosus

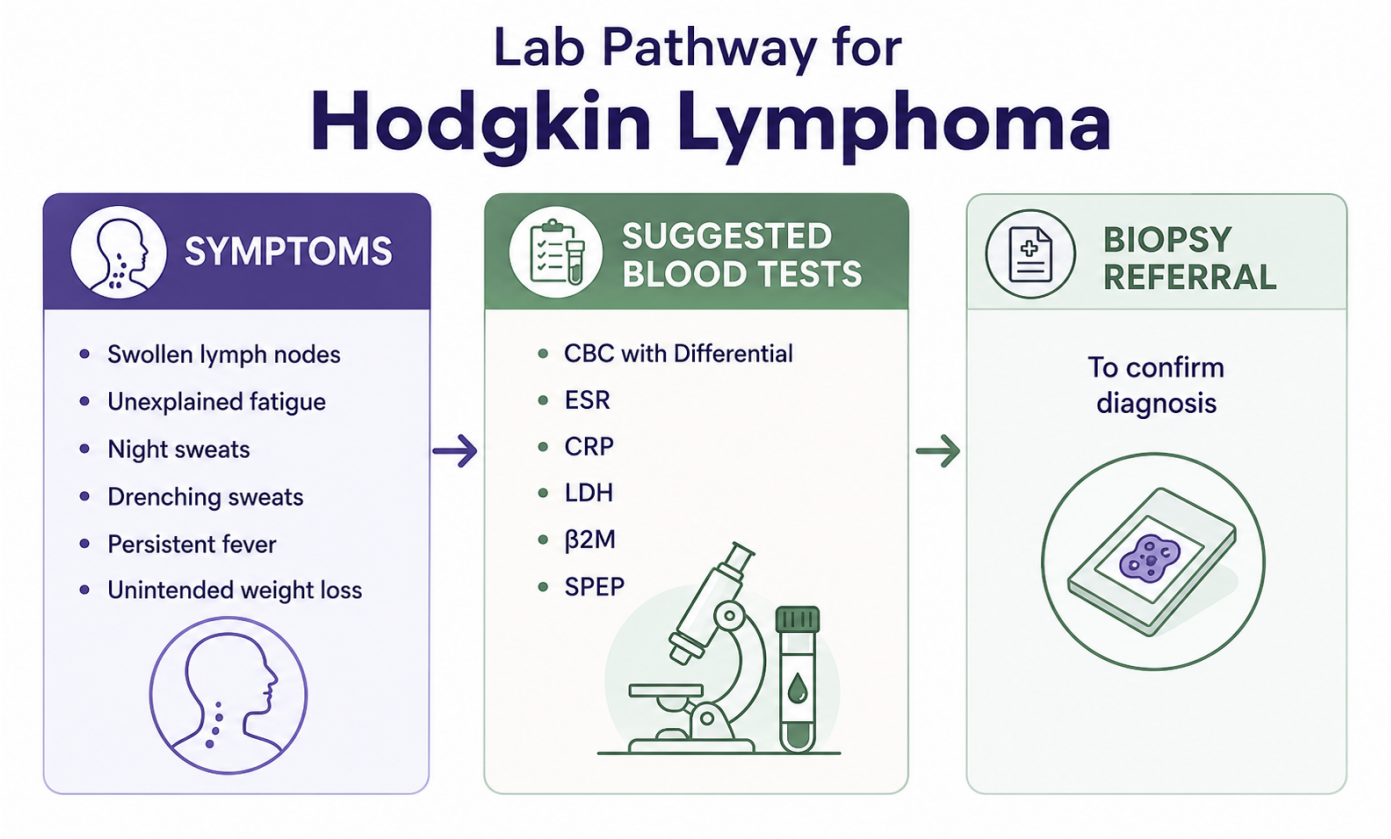
Pathway for Evaluating Unexplained Lymphadenopathy



Diagnostic Thresholds (Ann Arbor/Lugano Staging and Risk)

Hodgkin lymphoma diagnosis follows a stepwise sequence: **clinical suspicion** (persistent painless lymphadenopathy, B symptoms, or incidental imaging finding), **excisional lymph node biopsy** with immunohistochemistry to confirm histologic subtype, laboratory workup to establish baseline organ function and prognostic factors, and **FDG-PET/CT** for definitive staging.[1,15] **Excisional biopsy is the diagnostic standard**; fine-needle aspiration alone is insufficient because the diagnosis of HL requires assessment of tissue architecture and the characteristic **Reed-Sternberg cell microenvironment**.[1,15] Core needle biopsy may be acceptable when excisional biopsy is not feasible, provided adequate tissue is obtained for expert hematopathology review.[1] **Immunohistochemistry confirms the subtype**: **classical HL** (CD15+, CD30+, PAX-5+ weak) versus **nodular lymphocyte-predominant HL** (CD20+, CD45+, BCL6+), and EBER-ISH is recommended at initial diagnosis to determine EBV status.[1]

The essential workup includes CBC with differential, ESR, comprehensive metabolic panel with LDH, HIV testing, and FDG-PET/CT (skull base to mid-thigh).[1] Selected cases require PFTs with DLCO **before** bleomycin-containing therapy (DLCO threshold ≥60%), echocardiogram **before** anthracycline-based therapy, and diagnostic contrast-enhanced CT **when radiation therapy is planned**.[1] Bone marrow biopsy is no longer routinely indicated **when PET/CT is performed**; homogeneous marrow uptake excludes involvement, while ≥3 multifocal skeletal lesions assume involvement.[1,15]



Initial Staging: Ann Arbor System with Lugano Modification

Once the diagnostic workup is complete, disease stage is established using the **Lugano classification** (2014), which is derived from the **Ann Arbor staging system with Cotswolds modifications** and remains the current international standard.[1,15,25] This classification describes anatomic distribution of disease extent using **stages I–IV**, with **suffixes A/B for symptoms** (required for HL, unlike NHL) and **E for contiguous extranodal extension**.[1,15] The Lugano modification eliminated the "**X**" **designation** for bulky disease, replacing it with a **recording of the largest tumor diameter**; however, the NCCN guidelines retain the **mediastinal mass ratio** (MMR >0.33) and **>10 cm** thresholds for defining **bulky disease**.[1,15]

STAGE	DEFINITION
I	Single lymph node region (I) or single extralymphatic site (**I_E**)
II	≥2 lymph node regions, same side of diaphragm (**II**); ± contiguous extranodal extension(**II_E**)

STAGE	DEFINITION
III	Lymph node regions on both sides of diaphragm; ± spleen (**IIIS**) or contiguous extranodal site (**IIIE**)
IV	Disseminated involvement of ≥1 extralymphatic organ (lung, liver, bone, bone marrow) ± nodal involvement
A/B	**A** = no systemic symptoms; **B** = fever >38°C, drenching night sweats, or weight loss >10% in 6 months
E	Contiguous extranodal extension encompassable within an appropriate radiation field

Risk Stratification: Early-Stage Disease

Once staged, patients with stage I–II disease are further classified as **favorable** or **unfavorable** based on risk factors that vary slightly by study group (GHSG, EORTC, NCCN).[1] This distinction directly **determines treatment intensity**; favorable patients may receive abbreviated chemotherapy ± radiation, while unfavorable patients require more intensive regimens.[1]

The NCCN staging/risk classification algorithm and unfavorable risk factor definitions are shown below:

STAGE	BMD OR >10 CM ADENOPATHY	# NODAL REGIONS	ESR ≥50 MM/HR	E-LESION(S)	TYPE
IA/IIA	**No**	≤2	No	No	Favorable Disease by GHSG criteria
IA/IIA	**No**	≤3	No	Yes/No	Favorable Disease by EORTC criteria
IA/IIA	**Yes**	Any	Yes/No	Yes/No	Unfavorable Disease
III-IV	**Yes/No**	Any	Yes/No	Yes/No	Unfavorable Disease
	Yes/No	Any	N/A	Yes/No	Advanced Disease

ABBREVIATIONS: BMD = bulky mediastinal disease; ESR = erythrocyte sedimentation rate; GHSG = German Hodgkin Study Group; EORTC = European Organisation for Research and Treatment of Cancer; NCCN = National Comprehensive Cancer Network
***Table adapted from the NCCN Hodgkin Lymphoma (Version 1.2026) Guidelines**

Risk Stratification: Advanced-Stage Disease: International Prognostic Score (IPS)

For advanced-stage disease (**stage III–IV**), the **International Prognostic Score** (**IPS**), also known as the **Hasenclever score**, is the most widely used prognostic tool.[26] Developed from 5,141 patients treated before 1992, it assigns **1 point** for each of **7 adverse factors**; each additional factor reduces 5-year freedom from progression by approximately **8%**.[26]

IPS FACTOR (1 POINT EACH)	THRESHOLD
Albumin	<4 g/dL
Hemoglobin	<10.5 g/dL
Sex	Male
Age	≥45 years
Stage	IV
Leukocytosis	WBC ≥15,000/mm^3
Lymphocytopenia	Lymphocytes <600/mm^3 or <8% of WBC

ABBREVIATIONS: IPS = International Prognostic Score; WBC = white blood cell count

Response Assessment: Deauville 5-Point Scale

The Deauville 5-point scale is the standardized method for interpreting FDG-PET/CT **at interim** (after 2 cycles) and **end-of-treatment timepoints**, and it directly drives all PET-adapted treatment decisions in the NCCN algorithms.[1,27]

SCORE		PET/CT SCAN RESULT
Negative	**1**	No uptake
Negative	**2**	Uptake ≤ mediastinum
Negative	**3**	Uptake > mediastinum but ≤ liver
Positive	**4**	Uptake moderately higher than liver and visually above adjacent background activity
Positive	**5**	Uptake markedly higher than liver and/or new lesions
Positive	**X***	New areas of uptake unlikely to be related to lymphoma

ABBREVIATIONS: CT = computed tomography; FDG = fluorodeoxyglucose; PET = positron emission tomography
***Watchful waiting, biopsy, or additional imaging tests may be appropriate depending on clinical circumstances**

Staging/Assessment Tool Summary

SYSTEM	PURPOSE	KEY FEATURES
Ann Arbor/Lugano (2014)[15,25]	Anatomic staging (I–IV)	**PET-CT–based**; suffixes A/B (symptoms), E (extranodal); BMB no longer required with PET
Early-stage risk (GHSG/EORTC/NCCN)[1]	Favorable vs. unfavorable (stage I–II)	ESR ≥50, B symptoms, MMR >0.33, ≥3–4 nodal regions, bulky >10 cm

SYSTEM	PURPOSE	KEY FEATURES
IPS (Hasenclever, 1998)[26]	Advanced-stage prognostication (III–IV)	**7 factors**; each reduces 5-yr FFP by ~8%; narrowed range in modern era
A-HIPI (HoLISTIC, 2023)[28]	Refined advanced-stage prognostication	**Continuous variables**; c-statistic 0.720 for OS; online calculator available
Deauville 5-point scale[27]	PET response assessment	Scores **1–3** = adequate; **4–5** = inadequate; drives **all** PET-adapted treatment decisions
Geriatric Assessment[29–31]	Fitness classification (age >60)	ADL, IADL, cognition, comorbidity, nutrition, polypharmacy; **G-8 ≤14 triggers full GA**

ABBREVIATIONS: A-HIPI = Advanced-Stage Hodgkin Lymphoma International Prognostic Index; ADL = activities of daily living; BMB = bone marrow biopsy; CT = computed tomography; EORTC = European Organisation for Research and Treatment of Cancer; ESR = erythrocyte sedimentation rate; FFP = freedom from progression; GA = geriatric assessment; GHSG = German Hodgkin Study Group; IADL = instrumental activities of daily living; IPS = International Prognostic Score; MMR = mediastinal mass ratio; NCCN = National Comprehensive Cancer Network; OS = overall survival; PET = positron emission tomography

CLINICAL PEARL: COMPREHENSIVE GERIATRIC ASSESSMENT TO GUIDE THERAPY INTENSITY

For patients age >60 years, the NCCN guidelines note that CHL is associated with poorer outcomes, more frequent B symptoms, mixed cellularity histology, EBV-positive disease, and medical comorbidities.[1] Both the **NCCN Older Adult Oncology Guidelines** and **ASCO guidelines** recommend performing a geriatric assessment in all older patients with cancer to identify vulnerabilities **not captured by routine oncology evaluation**.[29–31]
The GA evaluates functional status (ADL/IADL), comorbidity burden, cognition, mental health, nutrition, social support, polypharmacy, and mobility/falls.[29] The **G-8 screening tool** (score ≤14 suggests frailty risk and triggers full GA) and the CARG chemotherapy toxicity tool are recommended for initial screening.[31,32] **In HL specifically**, geriatric assessments including ADL and comorbidity evaluation should be objectively measured in **all older patients**, and proactive multidisciplinary management (geriatrics, cardiology, primary care) is recommended.[33] A recent real-life cohort study (n=140) validated the Frailty Score as an **independent predictor of OS in older HL patients**: 5-year OS was **79.2%** (fit), **59.2%** (unfit), and **36.4%** (frail).[34]

Clues to Dig Deeper

CLUE TO DIG DEEPER	WHAT IT MAY INDICATE	NEXT STEP
Supraclavicular (Virchow's) node in an older adult	**High malignancy probability**, lymphoma or metastatic carcinoma[12,35]	Expedited excisional biopsy; **do not observe**[12,35]

CLUE TO DIG DEEPER	WHAT IT MAY INDICATE	NEXT STEP
Bilateral hilar/ mediastinal adenopathy with intense FDG uptake	**HL vs. sarcoidosis**, both intensely FDG-avid[12]	**Tissue diagnosis**; avoid empiric corticosteroids, which mask histology[12]
Rising ESR or LDH with constitutional symptoms	**Active lymphoma or malignancy**; LDH >250 U/L is an independent risk factor for lymphoma in FUO with lymphadenopathy (**OR 3.89**); ESR >40 mm/h was present in **100%** of FUO-associated malignancies[20,36]	**FDG-PET/CT to localize disease**; prioritize biopsy when age >45, LDH >250 U/L, and absence of rash co-occur[20]
New lymphadenopathy in a treated HL patient	Suspected relapse[1]	Same-day oncology contact; **do not wait** for routine scheduling[1]
Asymmetric/rapid node enlargement in autoimmune disease	Possible **secondary lymphoma transformation** (Sjogren, RA, SLE)[12]	**Biopsy** rather than attributing to the underlying autoimmune condition[12]
Peripheral CT enhancement/ multilocular nodes	Favors **tuberculous lymphadenitis** over lymphoma[12]	**Excisional biopsy**; FNA cannot reliably exclude TB in older reactivation disease[12]

ABBREVIATIONS: CT = computed tomography; ESR = erythrocyte sedimentation rate; FDG = fluorodeoxyglucose; FNA = fine-needle aspiration; FUO = fever of unknown origin; HL = Hodgkin lymphoma; LDH = lactate dehydrogenase; OR = odds ratio; PET = positron emission tomography; RA = rheumatoid arthritis; SLE = systemic lupus erythematosus; TB = tuberculosis

Common Oversights

COMMON CLINICAL OVERSIGHT	CONSEQUENCE	CORRECTIVE ACTION
Excluding HL because the patient is 'too old'	**Delayed diagnosis** at the 50-70 peak, where outcomes are **already worse**[3,7]	**Keep HL on the differential** for older adults with **lymphadenopathy and B symptoms**[3,7]
Relying on a clear chest radiograph to rule out disease	**Missed** mediastinal/retroperitoneal involvement[1,3]	Obtain CT **and** FDG-PET/CT for any credible suspicion[1,3]
Accepting FNA as adequate for diagnosis	**False-negative result**; loss of architecture needed for **Reed-Sternberg identification**[1,13]	**Insist on excisional biopsy**; reserve core needle for inaccessible sites with expert review[1,13]

COMMON CLINICAL OVERSIGHT	CONSEQUENCE	CORRECTIVE ACTION
Empiric antibiotics before referral	Time-to-treatment delay in a **curable but time-sensitive cancer**[1,7]	Refer urgently in parallel; do not wait for an antibiotic course to finish[1,7]
Missing new dyspnea/dry cough during ABVD	Untreated **bleomycin lung toxicity** (mortality ~**18%** in some series)[2,37]	Treat new respiratory symptoms on ABVD as **possible BLT**; contact oncology, **hold bleomycin**[2,37]
Not screening survivors for late effects	**Missed**: second cancers, cardiac disease, and hypothyroidism[38]	**Active PCP surveillance**: TSH, enhanced breast screening, cardiac risk management[38]
Requiring all three B symptoms before acting	Single severe symptoms dismissed; **investigation deferred**[1]	Investigate **any single severe B symptom** (fever, drenching sweats, or >10% weight loss)[1]

ABBREVIATIONS: ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; BLT = bleomycin lung toxicity; CT = computed tomography; FDG = fluorodeoxyglucose; FNA = fine-needle aspiration; HL = Hodgkin lymphoma; PCP = primary care provider; PET = positron emission tomography; TSH = thyroid-stimulating hormone

Key Differentials in Elderly

DIFFERENTIAL IN OLDER ADULTS	OVERLAPPING FEATURES	DISTINGUISHING CLUE
Non-Hodgkin lymphoma (esp. DLBCL)	Painless lymphadenopathy and B symptoms, **clinically indistinguishable**[3,39]	EBV-positive DLBCL of the elderly (median onset ~71 y) **mimics cHL but has worse prognosis** ($p<0.001$); **IHC distinguishes**[3,39]
Sarcoidosis	Bilateral hilar adenopathy with **intense FDG uptake**[12]	**Bilateral symmetric adenopathy**, erythema nodosum, elevated ACE, non-caseating granulomas; biopsy **before** steroids[12]
Tuberculous lymphadenitis (reactivation)	**Cervical adenopathy**, intense FDG uptake on PET[12]	Peripheral CT enhancement/multilocular appearance; excisional biopsy required, **FNA unreliable in the elderly**[12]

DIFFERENTIAL IN OLDER ADULTS	OVERLAPPING FEATURES	DISTINGUISHING CLUE
Metastatic carcinoma	Localized adenopathy, constitutional symptoms; supraclavicular nodes[12]	Matted, firm, fixed nodes; **54%–84%** of supraclavicular lymphadenopathy is **malignant** (most commonly lung, breast, or retroperitoneal primaries); malignancy rates increase with age, reaching **8.4% in patients ≥70** in a US cohort; **seek primary tumor**[12,40]
Autoimmune adenopathy (RA, SLE, Sjogren, GCA/PMR)	**Lymphadenopathy with**: fever, sweats, weight loss, elevated ESR[12]	Known autoimmune disease and elevated inflammatory markers; **biopsy if asymmetric or rapidly enlarging**[12]
Drug-induced lymphadenopathy	**Generalized adenopathy** with fever and rash[12]	Phenytoin, carbamazepine, allopurinol; checkpoint inhibitors/TNF antagonists can **mimic lymphoma on imaging**[12]

ABBREVIATIONS: ACE = angiotensin-converting enzyme; cHL = classical Hodgkin lymphoma; CT = computed tomography; DLBCL = diffuse large B-cell lymphoma; EBV = Epstein-Barr virus; ESR = erythrocyte sedimentation rate; FDG = fluorodeoxyglucose; FNA = fine-needle aspiration; GCA = giant cell arteritis; IHC = immunohistochemistry; PET = positron emission tomography; PMR = polymyalgia rheumatica; RA = rheumatoid arthritis; SLE = systemic lupus erythematosus; TNF = tumor necrosis factor

CLINICAL PEARL: PATTERN RECOGNITION- HODGKIN VS. NON-HODGKIN LYMPHOMA IN OLDER ADULTS

PCPs cannot distinguish HL from NHL on clinical grounds alone — that requires excisional biopsy with immunohistochemistry.[1,39] However, presentation patterns can **raise or lower suspicion for each**. Hodgkin lymphoma classically presents with localized, contiguous cervical/supraclavicular lymphadenopathy, often with a mediastinal mass (>50% of cases) and B symptoms (fever, drenching night sweats, weight loss >10%).[3,7,12] Non-Hodgkin lymphoma more often presents with **generalized**, **noncontiguous lymphadenopathy and extranodal involvement** (particularly the GI tract) and is less likely to have mediastinal disease but **more likely to involve abdominal nodes**.[15,39] In older adults specifically, the distinction matters because **HL's second incidence peak** (ages 50–70) is driven by **mixed-cellularity and EBV-positive subtypes** that present with more advanced disease, infradiaphragmatic nodes, and B symptoms, mimicking aggressive NHL.[3,7] **The practical takeaway**: a patient ≥60 with localized upper-body adenopathy plus a mediastinal mass should **raise HL suspicion**, while diffuse adenopathy with extranodal sites (e.g., GI, skin, CNS) **favors NHL**. **However**, **both require the same urgent action**: excisional biopsy, **not FNA**, because Reed-Sternberg cells (HL) and NHL subtyping **both depend on intact tissue architecture and immunohistochemistry**.[1,39]

Comorbidity Screening

CONDITION	PREVALENCE/ ASSOCIATION*[14,33,41]	SCREENING APPROACH*[1,29,31]
Cardiovascular disease	**CVD is a leading cause of death in cHL survivors**; anthracycline cardiotoxicity **~14%** in lymphoma patients	**Baseline echocardiogram**; ECHO at 1 yr post-anthracycline; document **I25.10/I50.-** when present
Pulmonary disease (COPD, ILD)	Bleomycin pulmonary toxicity **~10% overall**; 10–24% with >2 cycles in patients >60	**Baseline PFTs with DLCO**; document **J44.-/J84.-** to support **bleomycin omission**
Pre-existing neuropathy	Peripheral neuropathy in **67%** of BV+AVD patients; dose modification required in **44%**	Document **E11.42/G63** baseline neuropathy; monitor per ADCETRIS label
Frailty/ functional impairment	5-yr OS: fit **79.2%**, unfit **59.2%**, frail **36.4%** (p <0.0001)	**G-8 screen**; refer for CGA per ASCO/NCCN; document **R54**, **R26.-**, **R63.4**
Cognitive impairment	Affects adherence, consent capacity, and toxicity reporting	**Mini-Cog/MoCA screen**; document **R41.-/ F03.-**; coordinate caregiver support
Renal impairment	Dacarbazine 40% renally excreted; **prolonged half-life** in renal dysfunction	Document **N18.-** CKD stage; monitor CrCl; **adjust doses** per FDA labels
Polypharmacy	Polypharmacy prevalence **29–61%** in older cancer patients; associated with increased grade ≥3 toxicity	Medication reconciliation **every visit**; Beers Criteria review; GA-guided deprescribing

ABBREVIATIONS: BLT = bleomycin lung toxicity; BV+AVD = brentuximab vedotin, doxorubicin, vinblastine, dacarbazine; CGA = Comprehensive Geriatric Assessment; cHL = classical Hodgkin lymphoma; CKD = chronic kidney disease; COPD = chronic obstructive pulmonary disease; CrCl = creatinine clearance; CVD = cardiovascular disease; DLCO = diffusing capacity of the lungs for carbon monoxide; GA = geriatric assessment; HL = Hodgkin lymphoma; ILD = interstitial lung disease; MoCA = Montreal Cognitive Assessment; OS = overall survival; PFT = pulmonary function test
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

⚠ RED FLAG — EMERGENCY/ACTIVATE CRISIS RESPONSE

These emergency conditions require **immediate intervention** in patients with known or suspected Hodgkin lymphoma:

- **Superior vena cava (SVC) syndrome** (facial/upper extremity swelling, dyspnea, stridor with mediastinal mass):[42,43] ~15,000 US cases/year, most from lung cancer and lymphoma
  - → **Emergency CT angiography**; airway assessment; steroids; tissue diagnosis before chemotherapy when feasible
- **Airway compromise from large mediastinal mass** (stridor, positional dyspnea, inability to lie flat):[42,44] **>50%** of HL patients have a mediastinal mass; acute SVC occlusion may cause **laryngeal edema**
  - → **Emergency airway management**; avoid sedation/supine positioning; urgent oncology consultation
- **Febrile neutropenia during chemotherapy** (temperature ≥38.3°C once, or ≥38.0°C sustained ≥1 hour, with ANC <500/mm^3):[45,46] **life-threatening**; requires empiric broad-spectrum antibiotics within 1 hour
  - → Emergency evaluation per NCCN febrile neutropenia guidance; blood cultures **before** antibiotics; empiric **anti-pseudomonal monotherapy** (cefepime, meropenem, or piperacillin/tazobactam)
- **Tumor lysis syndrome at treatment initiation** (hyperkalemia, hyperuricemia, hyperphosphatemia, hypocalcemia, acute kidney injury):[47,48] may cause renal failure, arrhythmias, seizures, and death if unanticipated
  - → **Emergency metabolic management**; rigorous hydration; rasburicase for high-risk patients; frequent electrolyte monitoring
- **Spinal cord compression** (new back pain with neurologic deficit → paresis, sensory level, bladder dysfunction):[49,50] pain **precedes myelopathy by weeks**; thoracic spine most commonly affected (**~60%**)
  - → **Emergency MRI of entire spine**; high-dose dexamethasone; urgent neurosurgical/radiation oncology consultation

⚠ RED FLAG — URGENT (24-72 HOURS)

Expedited workup required = **do not** refer to routine follow-up:

- **New persistent lymphadenopathy >2–4 weeks with B symptoms**, especially cervical/supraclavicular in a patient >55:[12] male sex, age >40, and B symptoms **increase malignancy risk**; avoid corticosteroids, which can mask lymphoma histology
  - → Urgent hematology-oncology referral; **do not** complete an empiric antibiotic trial before referring
- **Suspected relapse** (new lymphadenopathy, recurrent B symptoms, rising ESR/LDH) in a previously treated patient:[51] aggressive lymphomas require stat hematology/oncology consultation
  - → **Same-day oncology contact**; expedited PET/CT
- **New dyspnea, dry cough, or falling oxygen saturation during ABVD** → possible **bleomycin pulmonary toxicity**:[37] BPT ~10% overall; 10–24% with >2 cycles in patients >60, with 17–18% BPT-related mortality
  - → **Hold bleomycin immediately**; contact oncology/pulmonology; chest CT and PFTs with DLCO
- **Symptomatic anemia or thrombocytopenia** (Hgb <7 g/dL or platelets <20,000 with bleeding):[43] may indicate marrow involvement, treatment toxicity, or progression
  - → Urgent hematology evaluation; transfusion per institutional thresholds
- **A single severe unexplained B symptom even without palpable nodes, especially in older adults**:[12] HL can present without observable nodal growth; unexplained fever, drenching sweats, or >10% weight loss **warrant investigation**
  - → Expedited referral with CT imaging; **do not attribute to age alone**

3 MEAT DOCUMENTATION ESSENTIALS

Hodgkin lymphoma documentation translates clinical complexity into **a record that supports continuity**, **quality measurement**, and **accurate risk adjustment**. **The most frequent pitfalls**: unspecified subtype defaulting to **C81.90**, missing B-symptom designation that drives staging, uncoded comorbidities that shape regimen tolerability, and absent survivorship surveillance **after oncology discharge**. The MEAT framework below ties each element into **appropriate clinical action**:

*Case vignette: A 68-year-old male presents for follow-up. Excisional biopsy confirmed **mixed cellularity classical Hodgkin lymphoma** after six weeks of persistent left cervical lymphadenopathy, drenching night sweats, and 6 kg weight loss. A prior note read only "reactive lymphadenopathy, completed antibiotics." **Staging FDG-PET/CT** shows **stage IIIB disease**. Because he has active disease, the accurate code is **C81.28** (mixed cellularity cHL, intrathoracic and multiple sites), **not Z85.71**.*[4,5]

MONITOR: "Weight: 82 kg, down 6 kg over 3 months. **Functional status**: independent ADLs; G-8 = 13 → geriatric vulnerability flagged. **B symptoms**: drenching night sweats (present), unintentional weight loss >10% (present), fever (absent). **Left cervical node**: 3.2 cm, firm, non-tender. **Baseline ECHO**: LVEF 58%. **Baseline PFTs**: DLCO 72% predicted. **Surveillance schedule post-treatment**: PET/CT per protocol, TSH, breast/lung screening, and cardiac assessment per NCCN survivorship guidelines."

EVALUATE: "**Surgical pathology**: mixed cellularity classical Hodgkin lymphoma, Reed-Sternberg cells CD30+/CD15+. **Ann Arbor stage IIIB**. **IPS**: 3 (age >45, male, stage IV absent, Hgb <10.5 absent → calculate remaining factors). **Geriatric assessment**: G-8 = 13 → **unfit**; **formal CGA completed**; COPD (**J44.1**), baseline peripheral neuropathy (**G63**), polypharmacy (7 medications). **EBV status**: pending."

ASSESS: "Active mixed cellularity classical Hodgkin lymphoma, stage IIIB (**C81.28**). Associated: COPD (**J44.1**) = **limits bleomycin** to ≤2 cycles; peripheral neuropathy (**G63**) = affects brentuximab vedotin/vinblastine dosing; CKD stage 2 (**N18.2**), eGFR 74 = monitor dacarbazine clearance. G-8 of 13 = unfit; regimen intensity adjusted accordingly. PHQ-2 screened: negative."

TREAT: "**Oncology-directed**: A+AVD under consideration with **bleomycin limited** to ≤2 cycles given age and COPD; anthracycline retained (LVEF 58%). **PCP co-management**: pneumococcal/influenza vaccination updated; statin continued for vascular-risk control; fall-risk assessment → vitamin D repleted, **PT referral placed**; nutrition support → dietitian referral for weight loss. **Early palliative care consultation placed** for symptom management and goals-of-care discussion. ACP documented (CPT 99497): surrogate named, code status discussed. Return in 3 weeks or sooner for new symptoms."

Clinical Documentation Elements

- **Document the histologic subtype as stated on pathology**:[1,2,4] nodular sclerosis (**C81.1x**), mixed cellularity (**C81.2x**), lymphocyte-rich (**C81.0x**), lymphocyte-depleted (**C81.3x**), or nodular lymphocyte-predominant (**C81.7x**) → subtype drives both code family and treatment; **never default to** "unspecified" (**C81.9x**) when the pathology report specifies it
- **Document the anatomic site of involvement from imaging/pathology**:[1,4] cervical (5th character .1x), intrathoracic (.2x), or multiple sites (.8x); **extranodal involvement requires E-designation** in staging
- **State active-malignancy status**:[4] keep the active code (**C81.xx**) throughout chemotherapy, radiation, and response assessment → **Z85.71** only used when oncologist documents confirmed remission with **no ongoing treatment**
- **Document B-symptom designation explicitly as present or absent**:[1,44] fever >38°C, drenching night sweats, weight loss >10% in 6 months → B-symptom status **changes the stage suffix** (A vs. B) and directly **alters treatment intensity**
- **Confirm and document that immunophenotyping was performed at diagnosis**:[1,3] record CD30+/CD15+ Reed-Sternberg cell status; for NLPHL, document CD20+ status → changes the treatment algorithm and opens **rituximab eligibility**
- **Code each comorbidity at every applicable encounter**:[1,33] cardiac disease (**I25.10**, **I50.−**) affects anthracycline eligibility, pulmonary disease (**J44.−**, **J84.−**) limits bleomycin,

neuropathy (**E11.42**, **G63**) guides brentuximab vedotin/vinblastine dosing, renal impairment (**N18.−**) alters dacarbazine clearance

- **Document geriatric assessment findings and weight at every visit**:[29,34] record G-8 or VES-13 score, fit/unfit/frail classification, and frailty component codes (**R54**, **R26.−**, **R63.4**) that guide treatment intensity and define complexity in older adults

Reframing Common Documentation Shortcuts

INSTEAD OF…	DOCUMENT…[1,4,33]
'Hodgkin lymphoma, stable'	'Mixed cellularity cHL, multiple sites, active, stage IIIB (**C81.28**); no new B symptoms this visit' → **subtype** + **site** + **stage** + **B-symptom status** required for accurate coding
'History of lymphoma'	**Specify**: active (**C81.xx**), in remission (**C81.xA**), or surveillance-closed (**Z85.71**); ambiguity between these three states risks incorrect risk adjustment and treatment decisions
'On chemo, doing well'	**Name the regimen and modification**: 'Nivolumab-AVD cycle 4 of 6; bleomycin omitted for age >60 and DLCO 58%' → link **comorbidity codes** to regimen rationale
'Cancer survivor, see oncology'	**Record PCP-owned surveillance**: annual TSH (if neck RT), enhanced breast screening (if mediastinal RT ages 10–30), ECHO at 5–10 y intervals, lipids biannually, fasting glucose annually
'Tired, poor appetite'	**Document**: weight loss %, drenching sweats, fevers (B-symptom screen); record **G-8 frailty score** → these findings change staging suffix and treatment intensity

ABBREVIATIONS: AVD = doxorubicin, vinblastine, dacarbazine; cHL = classical Hodgkin lymphoma; DLCO = diffusing capacity of the lungs for carbon monoxide; G-8 = Geriatric 8 screening tool; PCP = primary care provider; RT = radiation therapy; TSH = thyroid-stimulating hormone

4 TREATMENT AND REFERRAL QUICK GUIDE

Treatment is **directed by hematology-oncology** and determined by histology (cHL vs. NLPHL), stage, risk classification, and fitness.[1,44] **The PCP role is:** recognition, urgent referral, co-management of comorbidities, and survivorship. **The single most important behavior change** is to refer for excisional biopsy and hematology-oncology evaluation **within 14 days** when a patient has persistent lymphadenopathy plus any B symptom, **without waiting for antibiotics**.[1,7]

Therapy Escalation Criteria

TRIGGER[1,12,15,52]	ACTION[1,29]
Persistent firm, non-tender node >2 cm for >2–4 weeks, especially cervical/ supraclavicular in adults >40	**Refer for excisional biopsy + hematology-oncology within 14 days**; **do not** complete an empiric antibiotic trial before referral
Any single severe B symptom (fever >38°C, drenching night sweats, or weight loss >10%/ 6 mo), even without palpable nodes	Expedited **hematology-oncology referral** with CT imaging; B-symptom status changes staging suffix and treatment intensity
Inadequate interim PET response (Deauville 4–5 on interim or end-of-treatment FDG-PET/ CT)	**Oncology reassessment**; may require treatment escalation, biopsy, or regimen change per response-adapted algorithm
Suspected relapse in treated patient (new nodes, recurrent B symptoms, rising ESR/ LDH)	**Same-day oncology contact**; biopsy to confirm histology **before salvage therapy**; routine surveillance imaging is not recommended
Older-adult fitness reassessment: G-8 ≤14 or VES-13 ≥3	Refer for Comprehensive Geriatric Assessment **before or alongside** therapy decisions; frailty independently predicts treatment intolerance and mortality

ABBREVIATIONS: B symptoms = fever, drenching night sweats, or >10% weight loss; CT = computed tomography; ESR = erythrocyte sedimentation rate; FDG-PET/CT = fluorodeoxyglucose positron emission tomography/computed tomography; G-8 = Geriatric 8 screening tool; LDH = lactate dehydrogenase; VES-13 = Vulnerable Elders Survey-13
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Hodgkin Lymphoma NCCN Guideline-Aligned Treatment by Profile

Classical Hodgkin lymphoma (cHL) treatment is **stage-**, **risk-**, and **fitness-stratified**, and **cure rates exceed 90%** for early-stage disease.[3,53] For patients aged ≤60, **early-stage favorable cHL is treated with** ABVD × 2 cycles + involved-site radiation therapy (ISRT) 20 Gy (category 1), while **early-stage unfavorable disease** receives more intensive combined-modality therapy or response-adapted approaches.[1] For **advanced-stage** (**III–IV**) **cHL**, the NCCN now lists **nivolumab-AVD** (N-AVD) and **BrECADD** + G-CSF as category 1 preferred first-line regimens, based on the **SWOG S1826 trial** showing 2-year PFS of 92% with N-AVD versus 83% with BV-AVD (HR 0.45).[1,9] In older adults (>60), treatment decisions hinge on **anthracycline candidacy and comorbidity burden**: bleomycin should **not be used** beyond 2 cycles, and N-AVD is preferred for advanced disease (2-year PFS 89% vs. 64% with BV-AVD; nonrelapse mortality 6% vs. 16%).[1,54] **Nodular lymphocyte-predominant HL** (NLPHL) is a biologically distinct, CD20+ entity managed separately from cHL → stage IA may be **observed** or treated with **ISRT alone**.[1,2] The PCP's role is not to select regimens but to **document comorbidities** that shape regimen eligibility, **ensure timely referral**, and **coordinate survivorship care** after treatment.[33]

PROFILE (CHL UNLESS NOTED)	GUIDELINE-ALIGNED APPROACH*[1]	KEY PCP NOTES*[1,3,33,54]
Early-stage favorable (age ≤60)	**ABVD × 2 cycles** + ISRT 20 Gy (category 1); PET-adapted chemotherapy alone is an option	10-year PFS **~87–93%**; selection of CMT vs. chemotherapy alone **depends on**: age, sex, cardiac risk, and mediastinal involvement
Early-stage unfavorable (age ≤60)	**ABVD × 2 cycles** → PET-adapted therapy; BrECADD or N-AVD–based options for Deauville 4–5	**Risk classified by**: B symptoms, bulk, ≥4 nodal sites, ESR ≥50; 4 cycles chemotherapy + ISRT 30 Gy is standard CMT
Advanced stage III–IV, fit	**N-AVD × 6 cycles** or **BrECADD** + G-CSF (both category 1 preferred); BV-AVD or ABVD are alternatives	**SWOG S1826**: N-AVD 2-year PFS 92% vs. BV-AVD 83%; less neuropathy, less treatment discontinuation; **G-CSF optional** with N-AVD
Age >60, anthracycline candidate	**A(B)VD with bleomycin limited to ≤2 cycles** (early stage); N-AVD × 6 cycles preferred for advanced disease (category 1)	**SWOG S1826 ≥60 subset**: N-AVD 2-year PFS **89%** vs. BV-AVD **64%**; nonrelapse mortality **6%** vs. **16%**; document cardiac/pulmonary status
Age >60 or any age, NOT anthracycline candidate	**BV-dacarbazine ± ISRT**; BV-nivolumab ± ISRT; single-agent checkpoint inhibitor ± ISRT	Document **cardiac/pulmonary comorbidity codes** (**I25.10**, **I50.−**, **J44.−**) to support **anthracycline-free regimen** selection
NLPHL, stage IA–IIA	**ISRT alone** (preferred for stage IA); observation after complete excision; **rituximab-based chemotherapy** for advanced/symptomatic disease	CD20+, indolent; managed distinctly from cHL = **do not** apply cHL chemotherapy reflexively; **rebiopsy at relapse** to rule out transformation
Relapsed/refractory cHL	Salvage chemotherapy → **HDT/ASCR** for eligible patients (category 1); **CPI-based second-line preferred** if no prior CPI	BV, nivolumab, and pembrolizumab are FDA-approved in **defined R/R settings**; clinical trial enrollment strongly encouraged

PROFILE (CHL UNLESS NOTED)	GUIDELINE-ALIGNED APPROACH*[1]	KEY PCP NOTES*[1,3,33,54]

ABBREVIATIONS: A(B)VD = doxorubicin, (bleomycin), vinblastine, dacarbazine; ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; ASCR = autologous stem cell rescue; AVD = doxorubicin, vinblastine, dacarbazine; BrECADD = brentuximab vedotin, etoposide, cyclophosphamide, doxorubicin, dacarbazine, dexamethasone; BV = brentuximab vedotin; BV-AVD = brentuximab vedotin, doxorubicin, vinblastine, dacarbazine; cHL = classical Hodgkin lymphoma; CMT = combined modality therapy; CPI = checkpoint inhibitor; ESR = erythrocyte sedimentation rate; FDA = US Food and Drug Administration; G-CSF = granulocyte colony-stimulating factor; HDT = high-dose therapy; ISRT = involved-site radiation therapy; N-AVD = nivolumab, doxorubicin, vinblastine, dacarbazine; NLPHL = nodular lymphocyte-predominant Hodgkin lymphoma; PCP = primary care provider; PFS = progression-free survival; R/R = relapsed/refractory
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

CLINICAL PEARL - N-AVD, THE VBC-ALIGNED FRONTLINE ALTERNATIVE

The N-AVD regimen (Nivolumab, Doxorubicin, Vinblastine, Dacarbazine) dramatically reduces non-relapse mortality in older populations by **replacing bleomycin with nivolumab**.[9,54] When appropriate, this is the preferred frontline approach for geriatric patients, **not a second-line option**.[1] PCPs do not prescribe chemotherapy, but they should be aware that ABVD in older adults carries up to a **24% risk of bleomycin lung toxicity** (with treatment-related mortality reaching 9%) and should advocate for regimen review when **any patient over 60** is being considered for bleomycin-containing therapy.[33,55]

Non-Pharmacologic Care and Supportive Interventions

SUPPORTIVE INTERVENTION	PURPOSE	PCP ROLE
Comprehensive Geriatric Assessment	Identify reversible deficits ECOG misses[29]	Initiate G-8 screen; refer for full CGA; address modifiable findings[29]
Nutritional support	Counter weight loss and treatment-related decline; ~**28%** of older lymphoma patients have **severe QoL decline**[7]	**Screen nutrition**; involve dietitian; monitor weight trajectory[7]
Fall-risk and functional support	**Maintain independence** and avoid SNF placement[7]	**Assess gait/falls**; arrange physical therapy as covered benefit[7,29]
Early palliative care integration	**Symptom control**; avoid non-beneficial emergency utilization[7]	**Refer early** for frail patients; align with goals of care[7]

ABBREVIATIONS: CGA = Comprehensive Geriatric Assessment; ECOG = Eastern Cooperative Oncology Group; G-8 = Geriatric 8 screening tool; PCP = primary care provider; QoL = quality of life; SNF = skilled nursing facility

Medication Safety and Key Interactions

AGENT	KEY SAFETY ISSUE*	STATUS/MONITORING*
Doxorubicin (anthracycline)	Dose-dependent **cardiotoxicity**; additive with mediastinal RT[1,14]	First-line; baseline echocardiogram; document cardiac comorbidity[1,14]
Bleomycin	**Bleomycin lung toxicity 10-24%** in patients >60 with >2 cycles; mortality **~18%**[37,55]	**Limit to ≤2 cycles if >60**; baseline DLCO; hold for new dyspnea/cough[1,37,55]
Brentuximab vedotin	**Peripheral neuropathy**[1]	**Frontline AVD** combinations and defined R/R; use caution with **baseline neuropathy**[1]
Nivolumab/ pembrolizumab	**Immune-related adverse events** (endocrine, pneumonitis, colitis)[1,9]	**N-AVD frontline**; checkpoint monotherapy in defined R/R settings; monitor irAEs[1,9]
Vinblastine	**Peripheral neuropathy**; myelosuppression[1]	**ABVD/AVD** component; reduce/hold for significant neuropathy[1]
Dacarbazine	**Myelosuppression**; renal clearance considerations[1]	**ABVD/AVD** and **BV-dacarbazine**; adjust with renal impairment[1]

ABBREVIATIONS: ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; AVD = doxorubicin, vinblastine, dacarbazine; BV = brentuximab vedotin; BV-dacarbazine = brentuximab vedotin plus dacarbazine; DLCO = diffusing capacity of the lungs for carbon monoxide; irAE = immune-related adverse event; N-AVD = nivolumab, doxorubicin, vinblastine, dacarbazine; R/R = relapsed/refractory; RT = radiation therapy
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

When to Refer

CRITERION	SPECIALIST[1,16,29]	URGENCY[1,31,56]
Persistent suspicious lymph node requiring tissue diagnosis	Surgery (excisional biopsy)	**Within 1–2 weeks**; excisional preferred over core/FNA
Suspected HL; confirmed diagnosis; suspected relapse	Hematology-oncology	**Within 14 days** for new suspicion; same-day for suspected relapse
Older adult with G-8 ≤14 or VES-13 ≥3	Geriatric oncology/CGA	**Before or alongside** treatment-intensity decisions
Pre-anthracycline assessment; post-treatment cardiac symptoms	Cardiology/cardio-oncology	**Pre-treatment for baseline**; expedited for new dyspnea/ chest pain in survivors

CRITERION	SPECIALIST[1,16,29]	URGENCY[1,31,56]
New dyspnea/dry cough during ABVD; baseline ILD/COPD	Pulmonology	**Immediate** for suspected bleomycin lung toxicity
Frail patient; high symptom burden; goals-of-care needs	Palliative care	**Early integration**, not end-of-life only

ABBREVIATIONS: ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; CGA = Comprehensive Geriatric Assessment; COPD = chronic obstructive pulmonary disease; FNA = fine-needle aspiration; G-8 = Geriatric 8 screening tool; HL = Hodgkin lymphoma; ILD = interstitial lung disease; VES-13 = Vulnerable Elders Survey-13

Follow-Up Timing

PHASE	PCP FOLLOW-UP FOCUS[1,38]	TIMING[1,38,57]
During active treatment	**Comorbidity control**, infection/ neutropenia vigilance, BLT symptoms	Coordinate with oncology **each cycle**; urgent contact for red flags
First 1-2 years post-treatment	Relapse vigilance, functional recovery	Per oncology surveillance; routine PET **not recommended** after confirmed complete response
Thyroid surveillance (neck/mediastinal RT)	**Hypothyroidism develops** in a substantial share of RT survivors	**Annual TSH** lifelong after neck/mediastinal RT
Breast cancer surveillance (chest RT)	Elevated breast cancer risk after chest RT	Enhanced screening beginning **7-8 years** post-RT, earlier than population age
Lung cancer surveillance (RT + smoking)	Elevated **lung cancer risk**	Consider annual low-dose CT for RT + smoking history
Cardiovascular surveillance	By ~40 years post-treatment, **68% develop a second cancer** or CVD	**Lifelong cardiac risk-factor optimization**; expedited cardiology for new symptoms

ABBREVIATIONS: BLT = bleomycin lung toxicity; CT = computed tomography; CVD = cardiovascular disease; PCP = primary care provider; PET = positron emission tomography; RT = radiation therapy; TSH = thyroid-stimulating hormone

Comorbidity Management - Primary Care Role

COMORBIDITY	APPROACH*[1,29,31]	CAUTION*[1,14,58]
Cardiovascular disease (I25.10, I50.-)	**Optimize risk factors**; baseline echocardiogram if anthracycline indicated; ECHO at 1 year post-anthracycline	Anthracycline + mediastinal RT raise **long-term cardiac risk**; cardiac status determines regimen eligibility; caution with anthracyclines if LVEF <50%
COPD/ILD (J44.-, J84.-)	**Baseline PFTs with DLCO** (≥60% threshold for bleomycin use); prompt evaluation of new respiratory symptoms	**Limits bleomycin**; new dyspnea/dry cough may signal BLT; bleomycin **should not be used** beyond 2 cycles if >60
Diabetes mellitus (E11.x)	Glycemic management during **corticosteroid-containing regimens**; monitor glucose closely	Steroids (e.g., in BrECADD dexamethasone) **worsen glycemic control** and infection risk
Pre-existing neuropathy (E11.42, G63)	Baseline documentation and interval monitoring for peripheral neuropathy	**Guides BV/vinblastine use**; BV-containing regimens carry 67% PN incidence; distinguishes treatment-emergent from pre-existing injury
CKD (N18.-)	**Estimated creatinine clearance** (not serum creatinine alone) at baseline and before each cycle; coordinate dose adjustment	Serum creatinine unreliable in older adults due to **sarcopenia**; affects dacarbazine and other agent clearance
Cognitive impairment/ depression (R41.-, F03.-)	**Mini-Cog/MoCA screening**; coordinate caregiver support; simplify oral regimens	**Affects**: adherence, consent capacity, and symptom reporting; dementia prevalence ~14% in patients >70
Polypharmacy (Z79.x)	Medication reconciliation **at every visit**; GA-guided deprescribing per Beers Criteria	Drug interactions with chemotherapy; anticholinergic and sedating agents **add fall and cognitive risk**

ABBREVIATIONS: BLT = bleomycin lung toxicity; BrECADD = brentuximab vedotin, etoposide, cyclophosphamide, doxorubicin, dacarbazine, dexamethasone; BV = brentuximab vedotin; CKD = chronic kidney disease; COPD = chronic obstructive pulmonary disease; DLCO = diffusing capacity of the lungs for carbon monoxide; GA = geriatric assessment; ILD = interstitial lung disease; LVEF = left ventricular ejection fraction; MoCA = Montreal Cognitive Assessment; PFT = pulmonary function test; PN = peripheral neuropathy; RT = radiation therapy
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Cost-Smart Options

BRAND (EST. COST)	GENERIC/ ALTERNATIVE (EST. COST)[1,9,59,60]	EST. SAVINGS[19,54,61]	COST-SMART TIP[1,56,62,63]
Routine surveillance PET/CT after CR (~$3,000–$6,000/scan)	Clinical follow-up: H&P + labs (CBC, ESR, chemistry) (**~$200–$400/visit**)	**~$2,500–$5,500 per avoided scan**; 10x lower cost over 3 years of follow-up	**NCCN**: "Surveillance FDG-PET/CT should not be done routinely due to risk for false positives"; clinical surveillance showed equivalent 5-year OS (96–97%) with **no benefit from routine imaging**
Repeat FNA → excisional biopsy sequence (~$500–$800 FNA + $5,000–$15,000 excisional = $5,500–$15,800 total)	Upfront excisional biopsy (**~$5,000–$15,000**)	**~$500–$800 per avoided FNA**; eliminates diagnostic delay	**FNA is nondiagnostic** in 10–17.5% of lymphoma cases; excisional biopsy is the NCCN-recommended **diagnostic standard for suspected HL**; right test once prevents repeat procedures and delays
BV-AVD × 6 cycles (Adcetris ~$19,000–$22,000/dose × 12 doses + AVD generics = ~$230,000–$270,000 total)	N-AVD × 6 cycles (Opdivo **~$8,000–$10,000/dose** × 12 doses + AVD generics = **~$100,000–$125,000 total**)	**~$130,000–$145,000** per course	**N-AVD is NCCN category 1 preferred**; S1826 showed superior 2-year PFS (92% vs. 83%) with lower toxicity; **G-CSF optional** with N-AVD (mandatory with BV-AVD) adds further savings; nonrelapse mortality 6% vs. 16% in patients >60
ABVD × 6 cycles (all generics: ~$150–$250/ cycle drug cost × 12 infusions = ~$2,000–$3,000 total drug cost)	Remains the lowest-cost regimen backbone	Baseline comparator	**All ABVD components** (doxorubicin, bleomycin, vinblastine, dacarbazine) **are available as generics**; no G-CSF required; OOP cost **~$1,150–$1,930** for 4 cycles under Medicare; limit bleomycin to ≤2 cycles if >60

BRAND (EST. COST)	GENERIC/ ALTERNATIVE (EST. COST)[1,9,59,60]	EST. SAVINGS[19,54,61]	COST-SMART TIP[1,56,62,63]
Branded G-CSF (Neupogen filgrastim ~$300–$400/dose)	**Biosimilar** filgrastim (Zarxio, Nivestym, Releuko **~$200–$280/ dose**)	**~$100–$120** per dose; **~$1,200–$1,400** per 6-cycle course	NCCN: "An FDA-approved biosimilar is an appropriate substitute;" **mandatory with BV-AVD and BrECADD**; optional with N-AVD
Late toxicity-driven ED visits and hospitalizations (~$5,000–$25,000+ per admission)	Proactive PCP survivorship care: annual TSH, ECHO, breast/lung screening (**~$500–$1,500/year**)	Variable; potentially **$10,000+** per prevented hospitalization	**Early palliative care reduces non-beneficial emergency utilization**; proactive comorbidity coding supports accurate risk adjustment and **prevents complications**

ABBREVIATIONS: ABVD = doxorubicin, bleomycin, vinblastine, dacarbazine; AVD = doxorubicin, vinblastine, dacarbazine; BrECADD = brentuximab vedotin, etoposide, cyclophosphamide, doxorubicin, dacarbazine, dexamethasone; BV-AVD = brentuximab vedotin plus AVD; CR = complete response; ED = emergency department; ESR = erythrocyte sedimentation rate; FDA = US Food and Drug Administration; FDG = fluorodeoxyglucose; FNA = fine-needle aspiration; G-CSF = granulocyte colony-stimulating factor; H&P = history and physical; HL = Hodgkin lymphoma; N-AVD = nivolumab plus AVD; NCCN = National Comprehensive Cancer Network; OOP = out-of-pocket; OS = overall survival; PCP = primary care provider; PET/CT = positron emission tomography/computed tomography; PFS = progression-free survival; TSH = thyroid-stimulating hormone

***Costs are approximate US estimates and vary by institution, payer, and region. Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Patient Education and Adherence

Hodgkin lymphoma patient education is distinguished by two features: the **high curability** of the disease (making treatment adherence and toxicity awareness critical) and the **long survivorship horizon**, during which late effects (secondary malignancies, cardiovascular disease, hypothyroidism) may **exceed the original cancer in clinical significance**.[3] In older adults, the additional challenge is that treatment intensity is fitness-stratified, meaning patients must understand that geriatric assessment–guided dose adjustments are evidence-based optimization, **not under-treatment**.[31,64] **Education should emphasize**: which symptoms require emergency evaluation (SVC syndrome, febrile neutropenia, new dyspnea during ABVD), why excisional biopsy is preferred over FNA, the meaning of B symptoms and their role in staging, and the lifelong survivorship monitoring schedule that the PCP co-manages after oncology discharge.[1,15,65]

DOCUMENTATION REMINDER — PATIENT EDUCATION

Document the following education topics, the patient and caregiver(s) present, materials provided, and patient understanding (**teach-back method**):

- **Diagnosis in plain language**:[2] Document that the patient understands histologic subtype (e.g., nodular sclerosis cHL vs. NLPHL), stage including A/B designation, and that HL is highly curable but requires **specific treatment** and **long-term follow-up**
- **Warning symptoms and when to call 911**:[1] Facial/upper extremity swelling or stridor (SVC syndrome), temperature ≥38.3°C with known neutropenia, new back pain with neurologic deficit, and signs of tumor lysis syndrome require immediate emergency evaluation
- **B symptoms and their significance**:[15] Document counseling that fever >38°C, drenching night sweats, and weight loss >10% in 6 months change the stage and treatment plan; recurrence of these symptoms after remission **may herald relapse**
- **Treatment toxicity awareness**:[3] Document counseling on regimen-specific risks = new dyspnea/dry cough during ABVD (**possible bleomycin lung toxicity**, hold and contact oncology immediately), numbness/tingling (neuropathy from BV/vinblastine), and cardiac symptoms after anthracycline therapy
- **Geriatric assessment and dose adjustment rationale** (when applicable):[64] Document counseling that GA-guided dose reductions are evidence-based care shown to reduce toxicity without compromising survival, not under-treatment
- **Survivorship monitoring**:[1] Document counseling on the **lifelong surveillance schedule**: annual TSH if neck RT, ECHO at 1 year post-anthracycline then every 5–10 years, annual breast screening (mammography + MRI) if chest RT between ages 10–30, and cardiovascular risk factor management
- **Advance care planning**:[29] Surrogate designation, code status, goals of care; CPT 99497/99498 billable during AWV with no patient copay; particularly relevant for frail older adults where fitness assessment shapes treatment intensity
- **Caregiver assessment**:[31] Document caregiver present, their understanding of warning symptoms, surveillance schedule, and medication timing; **screen for caregiver burden** (Zarit Burden Interview); refer to social work if strain identified

Quality Metrics Tie-In

No Hodgkin lymphoma–specific HEDIS measures or MIPS measures are currently active in MY2026, but HL management **intersects multiple cross-cutting quality measurement domains**: depression screening (PHQ-9), cardiovascular risk management, geriatric safety (fall risk, medication reconciliation), care transitions (post-chemotherapy follow-up), and advance care planning.[1,14] HL's combination of **elevated depression risk** (HR 2.30 vs. general population), high **cardiovascular morbidity** (CVD risk increased 3–5x in survivors treated with RT and anthracyclines), **hypothyroidism** in up to 40% of long-term survivors who received neck/mediastinal RT, **treatment-related hospitalization** rates of 28–37% during frontline

chemotherapy, and **polypharmacy** prevalence of 29–58% in older cancer patients means that cross-cutting national measures apply across the care trajectory and can **anchor quality reporting for any PCP managing an HL patient in a value-based program**.[1,3,41,66]

MEASURE	STANDARD	APPLICABILITY TO HL*
HEDIS CBP: Controlling High Blood Pressure	**Denominator**: adults 18–85 with hypertension **Numerator**: BP 140/90 mmHg; **Exclusions**: hospice, ESRD, inpatient palliative care	CVD risk **3–5x higher** in cHL survivors after mediastinal RT/ anthracyclines; NCCN recommends **annual BP** and aggressive **CVD risk factor management** for all survivors[1,3]
HEDIS COA: Care for Older Adults- Medication Review	**Denominator**: MA enrollees ≥66, continuously enrolled **Numerator**: 2 sub-measures documented annually: (**1**) functional status assessment, (**2**) medication review, **Exclusions**: hospice, ESRD	Drug interactions identified in **58%** of ambulatory cancer patients on IV therapy; doxorubicin/vinblastine (CYP2D6) and cyclophosphamide (CYP3A4) require **interaction screening**; **reconcile at every visit**[1,38]
HEDIS COA: Care for Older Adults- Functional Status Assessment	**Denominator**: enrollees ≥66 **Numerator**: functional status assessment documented annually **Exclusions**: hospice, ESRD	**G-8 and ECOG** directly satisfy this sub-measure; 5-year OS: fit **79%**, unfit **59%**, frail **36%** → functional status drives treatment intensity[2,64]
HEDIS TRC: Transitions of Care Patient	**Denominator:** enrollees ≥18 with inpatient discharge **Numerator:** 4 sub-measures within 30 days: (**1**) notification of inpatient admission, (**2**) receipt of discharge information, (**3**) patient engagement after discharge, (**4**) medication reconciliation post-discharge **Exclusions:** hospice	Hematologic malignancy patients readmitted **more than solid tumor patients** (HR 2.26); hospitalization rate 37% during BV-AVD; PCP follow-up within 7 days **reduces readmission risk**[1,41]
HEDIS DMS-E: Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adults	**Denominator:** enrollees ≥12 with diagnosis of major depression or dysthymia AND elevated PHQ-9 ≥10 **Numerator:** follow-up PHQ-9 documented within 4–8 months of index elevated score **Exclusions:** hospice	Depression risk **2.3x higher** in HL (HR 2.30); 10-year OS **70%** with mental health diagnosis vs. **86%** without ($p < 0.0001$); distress peaks **7–10 years post-treatment**[67,68]

MEASURE	STANDARD	APPLICABILITY TO HL*
HEDIS ACP: Advance Care Planning	**Denominator:** enrollees ≥66 **Numerator:** advance care plan or surrogate decision-maker documented, **OR** documentation that ACP was discussed but patient declined **Exclusions:** hospice	Fitness assessment shapes **treatment intensity** in older HL; frailty (5-year OS 36%) limits curative-intent options; CPT 99497/99498 billable during AWV[2]
HEDIS PCR: Plan All-Cause Readmission	**Denominator:** enrollees ≥18 with acute inpatient discharge **Numerator:** unplanned readmission within 30 days (lower is better) **Exclusions:** planned readmissions (maintenance chemotherapy, transplant), hospice, psychiatric	Hematologic malignancy is an **independent readmission predictor** (HR 2.26); advanced stage (OR 2.85) and polypharmacy (OR 1.78) are major drivers; early palliative care **reduces avoidable readmissions**[1,69]

ABBREVIATIONS: ACP = advance care planning; AWV = Annual Wellness Visit; BP = blood pressure; BV-AVD = brentuximab vedotin plus doxorubicin, vinblastine, dacarbazine; cHL = classical Hodgkin lymphoma; CPT = Current Procedural Terminology; CVD = cardiovascular disease; CYP2D6 = cytochrome P450 2D6; CYP3A4 = cytochrome P450 3A4; ECOG = Eastern Cooperative Oncology Group; ESRD = end-stage renal disease; G-8 = Geriatric 8; HEDIS = Healthcare Effectiveness Data and Information Set; HL = Hodgkin lymphoma; HR = hazard ratio; MA = Medicare Advantage; NCCN = National Comprehensive Cancer Network; OR = odds ratio; OS = overall survival; PCP = primary care provider; PHQ-9 = Patient Health Questionnaire-9; RT = radiation therapy
***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

5 CODING REMINDERS AND CASE EXAMPLES

Coding Specificity

ELEMENT	DOCUMENTATION REQUIREMENT[1,2,4,15]
Histologic subtype–driven code	Nodular sclerosis → **C81.1x**; mixed cellularity → **C81.2x**; NLPHL → **C81.0x**; lymphocyte-depleted → **C81.3x**; lymphocyte-rich → **C81.4x**; **do not default to C81.9x** when pathology specifies the subtype
Anatomic site specificity (5th character)	Head/face/neck (**.x1**), intrathoracic (**.x2**), intra-abdominal (**.x3**), axilla/upper limb (**.x4**), inguinal/lower limb (**.x5**), intrapelvic (**.x6**), spleen (**.x7**), multiple sites (**.x8**), extranodal (**.x9**); reserve **.x0** only when site is **genuinely undetermined** after full workup
Active vs. history of malignancy	Keep the active code (**C81.xx**) throughout treatment, response-adapted therapy, and active surveillance; use **C81.xA** (in remission) **only with oncologist-documented remission**; use **Z85.71** only after **oncology closes surveillance**

ELEMENT	DOCUMENTATION REQUIREMENT[1,2,4,15]
B-symptom designation	Document **A** (asymptomatic) or **B** (fever >38°C, drenching night sweats, weight loss >10%/6 months) explicitly → B designation changes the stage and treatment algorithm
NLPHL vs. cHL distinction	NLPHL (**C81.0x**) is CD20+, biologically distinct, and follows a **separate treatment algorithm** (observation, ISRT, or rituximab-based); do not apply cHL chemotherapy codes or regimens reflexively
Subtype and HCC mapping	All **C81.xx** codes → **HCC 21** (CNA RAF 0.671); **Z85.71** (personal history) → no HCC mapping; **premature transition** to **Z85.71** during active treatment or surveillance eliminates risk adjustment
Comorbidities; frequently undercoded	Cardiac disease (**I25.10**, **I50.-**), COPD/ILD (**J44.-**, **J84.-**), neuropathy (**E11.42**, **G63**), CKD (**N18.-**), cognitive impairment (**R41.-**, **F03.-**), and frailty components (**R54**, **R26.-**, **R63.4**) → each shapes regimen eligibility and documents clinical complexity
Staging documentation	Document **Lugano/Ann Arbor stage with A/B suffix**; record risk classification (early favorable/unfavorable per GHSG/EORTC/NCCN factors, or **IPS for advanced disease**); staging drives the entire treatment algorithm

ABBREVIATIONS: cHL = classical Hodgkin lymphoma; CKD = chronic kidney disease; CNA = Community Non-Dual Eligible, Aged; COPD = chronic obstructive pulmonary disease; EORTC = European Organisation for Research and Treatment of Cancer; GHSG = German Hodgkin Study Group; HCC = Hierarchical Condition Category; HL = Hodgkin lymphoma; ILD = interstitial lung disease; IPS = International Prognostic Score; ISRT = involved-site radiation therapy; NLPHL = nodular lymphocyte-predominant Hodgkin lymphoma; RAF = Risk Adjustment Factor; V28 = CMS-HCC Model Version 28

Annual Clinical Review and Confirmation

- **Annual review**:[1] An active Hodgkin lymphoma diagnosis remains current and must be reassessed and **documented with MEAT each year** → histologic subtype, anatomic site, Lugano stage with A/B suffix, disease status, treatment phase, and comorbidity burden
- **Visit modality**: A face-to-face **or** synchronous audio-video telehealth encounter qualifies when it supports **meaningful clinical evaluation**; chart updates without an encounter do not satisfy MEAT
- **Histologic subtype verification**:[1,2] Before accepting **C81.9x** (unspecified), **confirm subtype from pathology**: nodular sclerosis → **C81.1x**; mixed cellularity → **C81.2x**; NLPHL → **C81.0x**; lymphocyte-depleted → **C81.3x**; lymphocyte-rich → **C81.4x**; each follows a **distinct treatment algorithm** despite mapping to the same HCC
- **Active disease vs. history**:[4,15] **Z85.71** (personal history) applies only after oncology has **definitively closed surveillance**; a patient on active treatment, response-adapted therapy, or post-treatment surveillance **retains the active code** (**C81.xx**); use **C81.xA** only with oncologist-documented remission

- **B-symptom and stage confirmation**:[1,15] Re-document the **presence or absence of B symptoms** (fever >38°C, drenching night sweats, weight loss >10%/6 months) and **current Lugano stage** at each annual review → B designation changes the stage suffix and treatment algorithm
- **Comorbidity carry-forward**:[1,3] Confirm that treatment-shaping comorbidities = cardiac (**I25.10**, **I50.-**), pulmonary (**J44.-**, **J84.-**), neuropathy (**E11.42**, **G63**), renal (**N18.-**), cognitive (**R41.-**, **F03.-**), and frailty components (**R54**, **R26.-**, **R63.4**) remain on the problem list and are **independently coded each year** they are addressed
- **Avoid rollover**: Do not copy forward a prior note **without updating**: the histologic subtype and site, active-disease status, current stage, treatment phase and modifications, survivorship surveillance findings, and the comorbidity burden that documents regimen rationale

Good Documentation - EHR Tips

- **EHR TIP — Smartphrase]** Build a **.chl_visit dot phrase** that **auto-populates**: subtype-specific **C81.xx** code (**C81.1x** nodular sclerosis, **C81.2x** mixed cellularity, **C81.0x** NLPHL), anatomic site (5th character), **Lugano stage with A/B suffix**, disease status (active/remission/history), B-symptom documentation, and treatment-shaping comorbidities (**I25.10**, **J44.-**, **G63**, **N18.-**). Separate **.chl_survivor phrase** for post-treatment: subtype, last imaging date/result, TSH, cardiac assessment, and screening schedule. **Eliminates unspecified C81.9x coding** and supports MEAT in a single paste
- **[EHR TIP — Alert]** "Subtype Check" = **flags C81.9x** when pathology-confirmed subtype exists elsewhere in chart. "Active vs. History Guard" = **flags Z85.71** while antineoplastic therapy remains on active medication list or surveillance imaging is ongoing. "B-Symptom Prompt" = **requires A or B suffix documentation** before staging is finalized
- **[EHR TIP — Best Practice]** Pin **subtype-specific C81.xx with site and stage** (e.g., "Mixed cellularity cHL, intrathoracic, C81.22, stage IIIB, active"), **not** "Hodgkin lymphoma." Code comorbidities individually (**I50.-**, **J44.-**, **G63**, **N18.-**). Reserve **Z85.71** only after oncology has definitively closed surveillance
- **[EHR TIP — Workflow] Fire BPA when**: baseline echocardiogram **absent before anthracycline**; PFTs/DLCO **undocumented before bleomycin**; **G-8 not completed** in patient ≥65; **B symptoms undocumented** at staging; **survivorship screening overdue** per protocol; no MEAT encounter in 6 months. Flag **C81.9x** persisting **>30 days** for subtype upgrade
- **[EHR TIP — Order Set]** "**cHL Active Treatment**": CBC, CMP, ESR, LDH, PFTs with DLCO, echocardiogram, PET/CT per protocol, G-8 screen (if ≥65). "**cHL Survivorship**": annual TSH, lipid panel, fasting glucose, breast screening (if chest RT), low-dose chest CT (if chest RT and smoking history), cardiac assessment, neuropathy check

Brief Case Examples

SUCCESS: THREE-AXIS CODING, COMORBIDITIES LINKED, COORDINATED CARE

SCENARIO

A 68-year-old male with a firm, **non-tender left cervical node** persisting 6 weeks, **drenching night sweats**, and 6 kg weight loss. **PMH**: COPD, baseline peripheral neuropathy. Provider obtained excisional biopsy within 14 days, confirmed diagnosis, and **documented the full clinical picture through staging and treatment initiation**:

Documentation: "**C81.28**: Active mixed cellularity classical Hodgkin lymphoma, multiple sites, **stage IIIB** (pathology confirmed [date]). **B symptoms present**: drenching night sweats, weight loss >10%/6 months. **J44.1**: COPD, moderate → **bleomycin limited to ≤2 cycles**. **G63**: Baseline peripheral neuropathy → brentuximab vedotin/vinblastine dose adjustment considered. **Baseline echocardiogram**: LVEF [value]%; DLCO [value]% predicted. G-8 score [value]; referred for CGA. N-AVD selected in consultation with hematology and oncology as preferred regimen given **age >60 and pulmonary comorbidity**. **Survivorship plan initiated**: annual TSH, cardiac risk management, enhanced breast/lung screening if chest RT. Care coordinated across hematology-oncology, pulmonology, and geriatric oncology. Return [interval] or sooner for new symptoms."

Outcome: C81.28 (HCC 21) + J44.1 + G63 mapped with full diagnostic and treatment course documented. **Every MEAT element present**: subtype-specific diagnosis with pathology confirmation, anatomic site, Lugano staging with B-symptom suffix, treatment-shaping comorbidities coded independently and linked to regimen rationale (bleomycin limitation, neuropathy-aware dosing), geriatric functional assessment (G-8 with CGA referral), baseline cardiac and pulmonary function, regimen selection with clinical justification, survivorship surveillance plan, multidisciplinary care coordination, and follow-up interval with return criteria. **Diagnosis made by excisional biopsy rather than repeat FNA**.

PITFALL: UNSPECIFIED CODING AND OMITTED COMPLEXITY

SCENARIO

A 72-year-old with known mixed cellularity cHL, currently on active treatment. Presents for routine follow-up. PMH includes COPD and a recent fall.

Documentation as written: "Hodgkin lymphoma, stable. Continue meds. Hodgkin lymphoma, unspecified (**C81.90**)."

Consequence: (**1**) Subtype not specified: **C81.90** used despite mixed cellularity confirmed on pathology; correct code is **C81.2x** = **most common HL coding error**. (**2**) Anatomic site defaulted to unspecified (**.x0**) despite imaging documenting intrathoracic and multiple sites. (**3**) B symptoms, COPD, baseline neuropathy, and a recent fall went uncoded, understating true complexity and the rationale for regimen modification. (**4**) No staging, treatment details, functional assessment, or survivorship plan documented. No MEAT elements present beyond a bare, inaccurate diagnosis label.

RAF Impact: All **C81.xx** codes map to **HCC 21** (CNA RAF 0.671), so the RAF is **numerically unchanged**; the unspecified note **misrepresents the clinical picture**, omits the comorbidities that define treatment tolerability and clinical complexity, and weakens continuity, quality reporting, and audit defensibility.

Fix: Document from the pathology and oncology record; code all active comorbidities; specify subtype and site. **Corrected documentation**: "**C81.28**: Active mixed cellularity cHL, intrathoracic + multiple sites, **stage IIIB**. **B symptoms present**. **J44.1**: COPD → bleomycin limited. **G63**:

Baseline neuropathy. **R29.6**: Fall risk → assessment completed. G-8 score [value]. Current regimen: [name], cycle [X]. **Survivorship surveillance scheduled**. Return [interval] or sooner for new symptoms." **Coding after fix**: **C81.28** (HCC 21) + **J44.1** + **G63** + **R29.6** replaces **C81.90** = subtype-accurate, site-specific, active-disease coding with **full clinical picture preserved**.

REFERENCES

1.National Comprehensive Cancer Network. *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Hodgkin Lymphoma*. Version 2.2026. National Comprehensive Cancer Network; 2026. Accessed July 5, 2026. https://www.nccn.org/professionals/physician_gls/pdf/hodgkin.pdf

2.Ansell SM. Hodgkin lymphoma: 2025 update on diagnosis, risk-stratification, and management. *Am J Hematol*. 2024;99(12):2367-2378. doi:10.1002/ajh.27470

3.Brice P, de Kerviler E, Friedberg JW. Classical Hodgkin lymphoma. *Lancet Lond Engl*. 2021;398(10310): 1518-1527. doi:10.1016/S0140-6736(20)32207-8

4.Centers for Medicare & Medicaid Services (CMS), National Center for Health Statistics (NCHS), American Hospital Association (AHA), American Health Information Management Association (AHIMA). *ICD-10-CM Official Guidelines for Coding and Reporting, FY 2026*. U.S. Department of Health and Human Services; 2025. https://www.cms.gov/medicare/coding-billing/icd-10-codes

5.Epstein MM, Dutcher SK, Maro JC, et al. Validation of an electronic algorithm for Hodgkin and non-Hodgkin lymphoma in ICD-10-CM. *Pharmacoepidemiol Drug Saf*. 2021;30(7):910-917. doi:10.1002/pds.5256

6.Siegel RL, Kratzer TB, Wagle NS, Sung H, Jemal A. Cancer statistics, 2026. *CA Cancer J Clin*. 2026;76(1):e70043. doi:10.3322/caac.70043

7.Subramanian M, Evens A, Rhodes JM. Older Patients With Hodgkin Lymphoma: A Contemporary Review. *Cancer J*. 2026;32(3):e0828-e0828. doi:10.1097/PPO.0000000000000828

8. Evens AM, Hong F, Gordon LI, et al. The efficacy and tolerability of adriamycin, bleomycin, vinblastine, dacarbazine and Stanford V in older Hodgkin lymphoma patients: a comprehensive analysis from the North American intergroup trial E2496. *Br J Haematol*. 2013;161(1):76-86. doi:10.1111/bjh.12222

9.Herrera AF, LeBlanc M, Castellino SM, et al. Nivolumab+AVD in Advanced-Stage Classic Hodgkin's Lymphoma. *N Engl J Med*. 2024;391(15):1379-1389. doi:10.1056/NEJMoa2405888

10.Centers for Medicare & Medicaid Services. *2026 Final ICD-10-CM Mappings (CMS-HCC V28)*. U.S. Department of Health and Human Services; 2025. https://www.cms.gov/medicare/health-plans/medicareadvtgspecratestats/risk-adjustors/2026-model-software

11.Centers for Medicare & Medicaid Services. *CMS-HCC Model Relative Factor Tables (Community, Non-Dual, Aged)*. 2024. https://www.cms.gov/files/document/revised-cms-hcc-model-relative-factor-tablespdf

12.Falk N, Joseph R, Dieujuste M. Lymphadenopathy: Evaluation and Differential Diagnosis. *Am Fam Physician*. 2025;112(3):286-293.

13.Kroft SH, Sever CE, Bagg A, et al. Laboratory Workup of Lymphoma in Adults: Guideline From the American Society for Clinical Pathology and the College of American Pathologists. *Arch Pathol Lab Med*. 2021;145(3):269-290. doi:10.5858/arpa.2020-0261-SA

14.Sanft T, Day AT, Ansbaugh SM, et al. *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Survivorship. Version 2.2026*. Version 2.2026. National Comprehensive Cancer Network; 2026. https://www.nccn.org/guidelines/guidelines-detail?category=3&id=1466

15.Cheson BD, Fisher RI, Barrington SF, et al. Recommendations for initial evaluation, staging, and response assessment of Hodgkin and non-Hodgkin lymphoma: the Lugano classification. *J Clin Oncol Off J Am Soc Clin Oncol*. 2014;32(27):3059-3068. doi:10.1200/JCO.2013.54.8800

16.Ferrell BR, Temel JS, Balboni TA, et al. *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Palliative Care. Version 2.2026*. Version 2.2026. National Comprehensive Cancer Network; 2026. https://www.nccn.org/professionals/physician_gls/pdf/palliative.pdf

17.Voltin CA, Goergen H, Baues C, et al. Value of bone marrow biopsy in Hodgkin lymphoma patients staged by FDG PET: results from the German Hodgkin Study Group trials HD16, HD17, and HD18. *Ann Oncol Off J Eur Soc Med Oncol*. 2018;29(9):1926-1931. doi:10.1093/annonc/mdy250

18.Kreuzberger N, Goldkuhle M, von Tresckow B, et al. Positron emission tomography-adapted therapy for first-line treatment in adults with Hodgkin lymphoma. *Cochrane Database Syst Rev*. 2025;3(3):CD010533. doi:10.1002/14651858.CD010533.pub3

19.Dann EJ, Berkahn L, Mashiach T, et al. Hodgkin lymphoma patients in first remission: routine positron emission tomography/computerized tomography imaging is not superior to clinical follow-up for patients with no residual mass. *Br J Haematol*. 2014;164(5):694-700. doi:10.1111/bjh.12687

20.Liu H, Ruan G, Shi X, Liu X, Ge Y. Diagnostic Value of Lymph Node Biopsy in Adult Patients with Classic Fever of Unknown Origin Accompanied by Lymphadenopathy. *J Clin Med*. 2026;15(10). doi:10.3390/jcm15103792

21.Hirabayashi M, Georges D, Combes JD, Clifford GM. Attributable Fraction of Epstein-Barr Virus in Subtypes of Lymphoma: A Systematic Review and Global Meta-Analysis. *Int J Cancer*. 2026;159(4):896-903. doi:10.1002/ijc.70468

22.Hjalgrim H, Smedby KE, Rostgaard K, et al. Infectious mononucleosis, childhood social environment, and risk of Hodgkin lymphoma. *Cancer Res*. 2007;67(5):2382-2388. doi:10.1158/0008-5472.CAN-06-3566

23.Hjalgrim H, Askling J, Sørensen P, et al. Risk of Hodgkin's disease and other cancers after infectious mononucleosis. *J Natl Cancer Inst*. 2000;92(18):1522-1528. doi:10.1093/jnci/92.18.1522

24.Hjalgrim Henrik, Askling Johan, Rostgaard Klaus, et al. Characteristics of Hodgkin's Lymphoma after Infectious Mononucleosis. *N Engl J Med*. 2003;349(14):1324-1332. doi:10.1056/NEJMoa023141

25.Carbone PP, Kaplan HS, Musshoff K, Smithers DW, Tubiana M. Report of the Committee on Hodgkin's Disease Staging Classification. *Cancer Res*. 1971;31(11):1860-1861.

26.Hasenclever D, Diehl V. A prognostic score for advanced Hodgkin's disease. International Prognostic Factors Project on Advanced Hodgkin's Disease. *N Engl J Med*. 1998;339(21):1506-1514. doi:10.1056/NEJM199811193392104

27.Meignan M, Gallamini A, Meignan M, Gallamini A, Haioun C. Report on the First International Workshop on Interim-PET-Scan in Lymphoma. *Leuk Lymphoma*. 2009;50(8):1257-1260. doi:10.1080/10428190903040048

28.Rodday AM, Parsons SK, Upshaw JN, et al. The Advanced-Stage Hodgkin Lymphoma International Prognostic Index: Development and Validation of a Clinical Prediction Model From the HoLISTIC Consortium. *J Clin Oncol*. 2023;41(11):2076-2086. doi:10.1200/JCO.22.02473

29.National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Older Adult Oncology. 2025. https://www.nccn.org/professionals/physician_gls/pdf/senior.pdf*

30.Bergerot CD, Temin S, Verduzco-Aguirre HC, et al. Geriatric Assessment: ASCO Global Guideline. *JCO Glob Oncol*. 2025;11:e2500276. doi:10.1200/GO-25-00276

31.Dale W, Klepin HD, Williams GR, et al. Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy: ASCO Guideline Update. *J Clin Oncol Off J Am Soc Clin Oncol*. 2023;41(26):4293-4312. doi:10.1200/JCO.23.00933

32.Garcia MV, Agar MR, Soo WK, To T, Phillips JL. Screening Tools for Identifying Older Adults With Cancer Who May Benefit From a Geriatric Assessment: A Systematic Review. *JAMA Oncol*. 2021;7(4):616-627. doi:10.1001/jamaoncol.2020.6736

33. Evens AM, McKenna M, Ryu Tiger YK, Upshaw JN. Hodgkin lymphoma treatment for older persons in the modern era. *Hematol Am Soc Hematol Educ Program*. 2023;2023(1):483-499. doi:10.1182/hematology.2023000449

34.Ligia S, Assanto GM, Soriano T, et al. Prognostic impact of treatment-related and geriatric factors in older patients with classic Hodgkin lymphoma: A real-life cohort study. *Br J Haematol*. 2026;208(4):1296-1305. doi:10.1111/bjh.70390

35.Yenilmez E, Verdi Y, Ilbak A, et al. Demographic, clinical and laboratory characteristics for differential diagnosis of peripheral lymphadenopathy (LAP) and the etiologic distribution of LAP in adults; a multicenter, nested case-control study including 1401 patients from Turkey. *Intern Emerg Med*. 2021;16(8):2139-2153. doi:10.1007/s11739-021-02683-2

36.Naito T, Torikai K, Mizooka M, et al. Relationships between Causes of Fever of Unknown Origin and Inflammatory Markers: A Multicenter Collaborative Retrospective Study. *Intern Med Tokyo Jpn*. 2015;54(16):1989-1994. doi:10.2169/internalmedicine.54.3313

37.Böll B, Goergen H, Behringer K, et al. Bleomycin in older early-stage favorable Hodgkin lymphoma patients: analysis of the German Hodgkin Study Group (GHSG) HD10 and HD13 trials. *Blood*. 2016;127(18):2189-2192. doi:10.1182/blood-2015-11-681064

38.van Leeuwen FE, Ng AK. Long-term risk of second malignancy and cardiovascular disease after Hodgkin lymphoma treatment. *Hematol Am Soc Hematol Educ Program*. 2016;2016(1):323-330. doi:10.1182/asheducation-2016.1.323

39.Armitage JO, Gascoyne RD, Lunning MA, Cavalli F. Non-Hodgkin lymphoma. *Lancet Lond Engl*. 2017;390(10091):298-310. doi:10.1016/S0140-6736(16)32407-2

40.Kshirsagar RS, Anderson M, Boeckermann LM, et al. The Adult Neck Mass: Predictors of Malignancy. *Otolaryngol--Head Neck Surg Off J Am Acad Otolaryngol-Head Neck Surg*. 2021;165(5):673-681. doi:10.1177/0194599821996293

41.Connors JM, Jurczak W, Straus DJ, et al. Brentuximab Vedotin with Chemotherapy for Stage III or IV Hodgkin's Lymphoma. *N Engl J Med*. 2018;378(4):331-344. doi:10.1056/NEJMoa1708984

42.Expert Panel on Vascular Imaging, Bhave AD, Franssen N, et al. ACR Appropriateness Criteria® Thoracic Venous Occlusions-Suspected Superior Vena Cava Syndrome. *J Am Coll Radiol*. 2026;23(1):159-169. doi:10.1016/j.jacr.2025.10.029

43.Okello CD, Niyonzima N, Ferraresso M, et al. Haematological malignancies in sub-Saharan Africa: east Africa as an example for improving care. *Lancet Haematol*. 2021;8(10):e756-e769. doi:10.1016/S2352-3026(21)00198-8

44.Townsend W, Linch D. Hodgkin's lymphoma in adults. *Lancet Lond Engl*. 2012;380(9844):836-847. doi: 10.1016/S0140-6736(12)60035-X

45.National Comprehensive Cancer Network. *NCCN Clinical Practice Guidelines in Oncology: Hematopoietic Growth Factors*. Version 3.2026. National Comprehensive Cancer Network; 2025.

46.National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Prevention and Treatment of Cancer-Related Infections, Version 1.2026. Published online 2026.

47.National Comprehensive Cancer Network. *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): B-Cell Lymphomas*. National Comprehensive Cancer Network; 2026. https://www.nccn.org/professionals/physician_gls/pdf/b-cell.pdf

48.Bociek R. Gregory, Lunning Matthew. Tumor Lysis Syndrome. *N Engl J Med*. 2025;393(11):1104-1116. doi:10.1056/NEJMra2300923

49.Ropper Alexander E., Ropper Allan H. Acute Spinal Cord Compression. *N Engl J Med*. 376(14): 1358-1369. doi:10.1056/NEJMra1516539

50.Khasraw M, Posner JB. Neurological complications of systemic cancer. *Lancet Neurol*. 2010;9(12): 1214-1227. doi:10.1016/S1474-4422(10)70220-9

51.Paquin AR, Oyogoa E, McMurry HS, Kartika T, West M, Shatzel JJ. The diagnosis and management of suspected lymphoma in general practice. *Eur J Haematol*. 2023;110(1):3-13. doi:10.1111/ejh.13863

52.Hernández-Aguiar Y, Becerra-Bolaños Á, Rodríguez-Pérez A. Frailty and Oncology: An Increasingly Common Combination. *Cancer Med*. 2026;15(1):e71499. doi:10.1002/cam4.71499

53.Fuchs M, Goergen H, Kobe C, et al. Positron Emission Tomography-Guided Treatment in Early-Stage Favorable Hodgkin Lymphoma: Final Results of the International, Randomized Phase III HD16 Trial by the German Hodgkin Study Group. *J Clin Oncol Off J Am Soc Clin Oncol*. 2019;37(31):2835-2845. doi: 10.1200/JCO.19.00964

54.Rutherford SC, Li H, Herrera AF, et al. Nivolumab-AVD Versus Brentuximab Vedotin-AVD in Older Patients With Advanced-Stage Classic Hodgkin Lymphoma Enrolled on S1826. *J Clin Oncol Off J Am Soc Clin Oncol*. 2025;43(27):2968-2973. doi:10.1200/JCO-25-00204

55.Thomas TS, Luo S, Reagan PM, Keller JW, Sanfilippo KM, Carson KR. Advancing age and the risk of bleomycin pulmonary toxicity in a largely older cohort of patients with newly diagnosed Hodgkin Lymphoma. *J Geriatr Oncol*. 2020;11(1):69-74. doi:10.1016/j.jgo.2019.09.009

56.Sanders JJ, Temin S, Ghoshal A, et al. Palliative Care for Patients With Cancer: ASCO Guideline Update. *J Clin Oncol*. 2024;42(19):2336-2357. doi:10.1200/JCO.24.00542

57.Maraldo MV, Levis M, Andreis A, et al. An integrated approach to cardioprotection in lymphomas. *Lancet Haematol*. 2022;9(6):e445-e454. doi:10.1016/S2352-3026(22)00082-5

58.Krens SD, Lassche G, Jansman FGA, et al. Dose recommendations for anticancer drugs in patients with renal or hepatic impairment. *Lancet Oncol*. 2019;20(4):e200-e207. doi:10.1016/S1470-2045(19)30145-7

59.Pingali SR, Jewell SW, Havlat L, et al. Limited utility of routine surveillance imaging for classical Hodgkin lymphoma patients in first complete remission. *Cancer*. 2014;120(14):2122-2129. doi: 10.1002/cncr.28698

60.U.S. Food and Drug Administration. *Approved Drug Products with Therapeutic Equivalence Evaluations (Orange Book)*. 46th ed. U.S. Food and Drug Administration; 2026. https://www.fda.gov/drugs/drug-approvals-and-databases/approved-drug-products-therapeutic-equivalence-evaluations-orange-book

61.Groneck L, Quaas A, Hallek M, Zander T, Weihrauch MR. Ultrasound-guided core needle biopsies for workup of lymphadenopathy and lymphoma. *Eur J Haematol*. 2016;97(4):379-386. doi:10.1111/ejh.12742

62.Vijenthira A, Chan K, Cheung MC, Prica A. Cost-effectiveness of first-line treatment options for patients with advanced-stage Hodgkin lymphoma: a modelling study. *Lancet Haematol*. 2020;7(2):e146-e156. doi:10.1016/S2352-3026(19)30218-2

63.Elliott E, Watson T, Singh D, Wong C, Lo SS. Outcomes of Specialty Palliative Care Interventions for Patients With Hematologic Malignancies: A Systematic Review. *J Pain Symptom Manage*. 2021;62(4):863-875. doi:10.1016/j.jpainsymman.2021.03.014

64.Mohile SG, Mohamed MR, Xu H, et al. Evaluation of geriatric assessment and management on the toxic effects of cancer treatment (GAP70+): a cluster-randomised study. *Lancet Lond Engl*. 2021;398(10314):1894-1904. doi:10.1016/S0140-6736(21)01789-X

65.Higdon ML, Atkinson CJ, Lawrence KV. Oncologic Emergencies: Recognition and Initial Management. *Am Fam Physician*. 2018;97(11):741-748.

66.van Nimwegen FA, Schaapveld M, Janus CPM, et al. Cardiovascular disease after Hodgkin lymphoma treatment: 40-year disease risk. *JAMA Intern Med*. 2015;175(6):1007-1017. doi:10.1001/jamainternmed.2015.1180

67.Tao R, Chen Y, Kim S, et al. Mental health disorders are more common in patients with Hodgkin lymphoma and may negatively impact overall survival. *Cancer*. 2022;128(19):3564-3572. doi:10.1002/cncr.34359

68.Tilch MK, Galle PR, Schattenberg JM, Kostev K, Labenz C. Burden of depression and anxiety disorders per disease codes in patients with lymphoma in Germany. *Support Care Cancer Off J Multinatl Assoc Support Care Cancer*. 2022;30(3):2387-2395. doi:10.1007/s00520-021-06677-w

69.Raiss ME, Mehta KK, Zhang X, et al. Factors associated with avoidable 30-day readmissions in patients with cancer: a single institution study. *Support Care Cancer Off J Multinatl Assoc Support Care Cancer*. 2025;33(3):206. doi:10.1007/s00520-025-09215-0

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