# Oncology Clinical Pathways Mantle Cell Lymphoma

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## **Presumptive Conditions – Mantle Cell Lymphoma**

VA automatically presumes that certain disabilities were caused by military service. This is because of the unique circumstances of a specific Veteran's military service. If a presumed condition is diagnosed in a Veteran within a certain group, they can be awarded disability compensation.

#### <u>Atomic Veterans – Exposure to Ionizing Radiation</u>

• Lymphomas, other than Hodgkin's disease

#### Gulf War and Post 9/11 Veterans

If the patient served on or after Sept. 11, 2001, in Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Syria, Uzbekistan, or Yemen or if the patient served in the \*Southwest Asia theater of operations, or Somalia, on or after Aug. 2, 1990, specific conditions include:

• Lymphoma of any type

\* The Southwest Asia theater of operations refers to Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations.

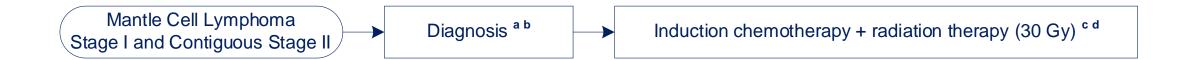
For more information, please visit U.S. Department of Veterans Affairs - Presumptive Disability Benefits (va.gov)







# Mantle Cell Lymphoma – Stage I and Contiguous Stage II



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email <u>CancerClinicalTrialsNavigation@va.gov.</u>

<sup>a</sup> **Diagnosis** requires tissue morphology and immunophenotype (IHC or flow cytometry) including CD3, CD20, and cyclin D1; SOX11 IHC and/or FISH for t(11;14) *IGH::CCND1* can also be performed at pathologist discretion to aid in diagnosis; for prognostic purposes, Ki-67 IHC should also be performed (prognostically significant cutoff of 30%), as well as molecular testing for TP53 mutations and FISH for del 17p (TP53)

<sup>b</sup> **Testing** to include: HIV, Hepatitis, LDH, uric acid, CBC with diff, CMP, PET, bone marrow biopsy to confirm limited state and is encouraged in other scenarios; endoscopy indicated to confirm limited stage disease or for GI symptoms or iron deficiency anemia; LP may be indicated for CNS symptoms

<sup>c</sup> Induction Chemotherapy is appropriate in younger, fit patients with more aggressive presentations; bendamustine/rituximab is the treatment of choice

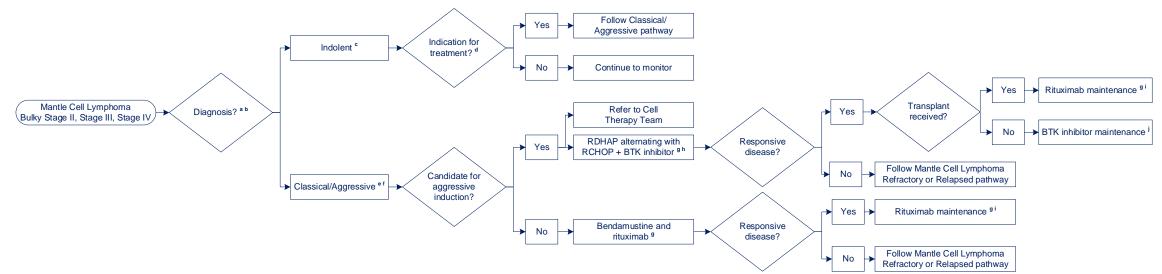
<sup>d</sup> **Rituximab** Hepatitis B serologies prior to starting anti-CD20 antibody therapy; consider HBV DNA if HBsAg or HBcAb positive; prescribe entecavir if HBsAg or HBcAb positive







#### Mantle Cell Lymphoma – Bulky Stage II, Stage II, Stage IV



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

<sup>a</sup> Diagnosis requires tissue morphology and immunophenotype (IHC or flow cytometry) including CD3, CD20, and cyclin D1; SOX11 IHC and/or FISH for t(11;14) *IGH::CCND1* can also be performed at pathologist discretion to aid in diagnosis; for prognostic purposes, Ki-67 IHC should also be performed (prognostically significant cutoff of 30%), as well as molecular testing for TP53 mutations and FISH for del 17p (TP53)

<sup>b</sup> Testing to include HIV, Hepatitis, LDH, uric acid, CBC with diff, CMP, PET, bone marrow biopsy to confirm limited state and is encouraged in other scenarios; endoscopy indicated to confirm limited stage disease or for GI symptoms or iron deficiency anemia; LP may be indicated for CNS symptoms; evaluate cardiovascular risk factors and baseline LVEF (with ECHO or MUGA)

<sup>c</sup> Indolent combination of clinical and pathological presentation usually includes leukemic non-nodal CLL like presentation with low tumor burden and Ki-67 <10%; generally must be CD5 positive and cyclin D1 positive and frequently SOX 11 negative with clinical observation stability overtime

Indications for Treatment include anemia Hgb <10 g/dL, platelets <100,000/mm<sup>3</sup>, thrombocytopenia/anemia must be non-immune and not related to alternate causes, B-symptoms, and symptomatic adenopathy; consider cross-sectional imaging prior to initiation of therapy

Classical/Aggressive blastoid variant has poor prognosis

<sup>f</sup> **TP53 Mutations** confers a poor prognosis and there is no standard therapy recommended; auto transplant might not be a good idea for the patients with TP53 mutation; consolidation may not be effective for them; consider clinical trial or alternate therapies that incorporate novel agents

<sup>g</sup> Rituximab Supportive Care Hepatitis B serologies prior to starting anti-CD20 antibody therapy (e.g. rituximab); consider HBV DNA if HBsAg or HBcAb positive; prescribe entecavir if HBsAg or HBcAb positive

RDHAP Regimen should be used with caution in patients on anticoagulation or who are at high-risk for bleeding

Rituximab Maintenance different durations of rituximab have been studied; however, the maximum duration recommended is 3 years

BTK Inhibitor maintenance duration recommended is two years

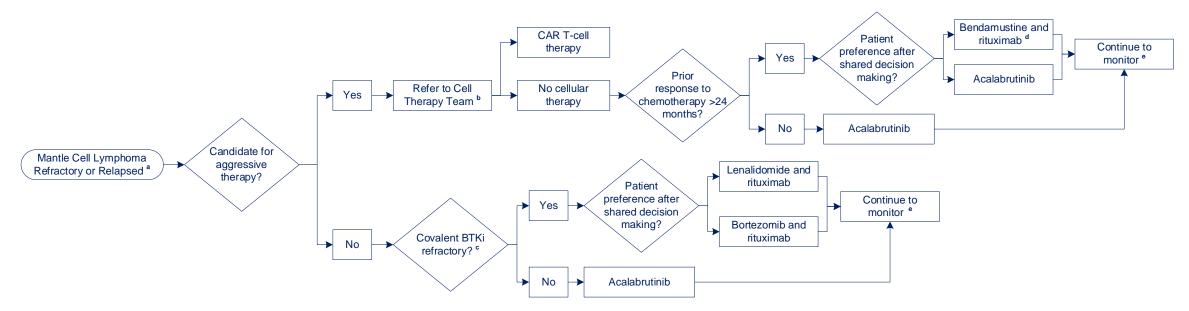
RDHAP rituximab, dexamethasone, cytarabine, platinum agent (cisplatin, carboplatin, oxaliplatin) RCHOP rituximab, cyclophosphamide, doxorubicin, vincristine, prednisone







### Mantle Cell Lymphoma – Relapsed or Refractory



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

<sup>a</sup> Refractory or Relapsed confirmed by excisional biopsy
<sup>b</sup> Refer to Cell Therapy Team for bridging therapies prior to CAR T-cell or autologous collection
<sup>c</sup> Covalent BTKi acalabrutinib, ibrutinib, or zanubrutinib
<sup>d</sup> Bendamustine if not used before
<sup>e</sup> Continue to Monitor consider pirtobrutinib for third line Mantle cell lymphoma and including prior covalent BTKi
BTKi Bruton Tyrosine Kinase Inhibitor
CAR Chimeric Antigen Receptor
SCT Stem Cell Transplantation







### Mantle Cell Lymphoma – Molecular Testing Table

Eligibility	Test Category	Test Type	Recommended Vendors	NPOP Coverage	Specimen Type
Mantle Cell Lymphoma (MCL)	IHC	Cyclin D1 (CCND1), TP53, SOX11, Ki-67	Local VA or locally contracted vendor	No	Bone Marrow Biopsy, Lymph Node Biopsy, Blood
	FISH	Translocations t(11;14) Test for deletion 17p	Local VA or locally contracted vendor	No	Bone Marrow Biopsy, Lymph Node Biopsy, Blood
	Molecular Testing	TP53 mutation	Local VA or locally contracted vendor	No	Bone Marrow Biopsy, Lymph Node Biopsy, Blood







## Mantle Cell Lymphoma – References

- 1. Center. FDA approves acalabrutinib with bendamustine and rituximab. U.S. Food and Drug Administration. Published 2025. <u>https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-acalabrutinib-bendamustine-and-rituximab-previously-untreated-mantle-cell-lymphoma</u>
- Collins TR. Ibrutinib-Rituximab Outperforms Chemotherapy in Front-Line MCL, Trial Finds. Ashpublications.org. Published December 5, 2024. Accessed February 14, 2025. <u>https://ashpublications.org/ashclinicalnews/news/8301/Ibrutinib-Rituximab-Outperforms-Chemotherapy-in</u>
- 3. Dreyling M, Doorduijn J, Giné E, et al. Ibrutinib combined with immunochemotherapy with or without autologous stem-cell transplantation versus immunochemotherapy and autologous stem-cell transplantation in previously untreated patients with mantle cell lymphoma (TRIANGLE): a three-arm, randomised, open-label, phase 3 superiority trial of the European Mantle Cell Lymphoma Network. Lancet. Published online May 1, 2024. doi:https://doi.org/10.1016/s0140-6736(24)00184-3
- Dreyling M, Mayer J, Belada D, et al. High-Risk Subgroups and MRD: An Updated Analysis of the Phase 3 ECHO Trial of Acalabrutinib with Bendamustine/Rituximab in Previously Untreated Mantle Cell Lymphoma. Blood. 2024;144(Supplement 1):1626-1626. doi:https://doi.org/10.1182/blood-2024-200290
- 5. Kumar A, Soumerai J, Abramson JS, et al. Zanubrutinib, obinutuzumab, and venetoclax for first-line treatment of mantle cell lymphoma with a TP53 mutation. Blood. 2025;145(5):497-507. doi:https://doi.org/10.1182/blood.2024025563





