Low-grade Lymphoproliferative Disorders
(CLH, HCL, T-PLL) – Adult\(^1\)

**PATIENT PRESENTATION**\(^{2,3}\)

- Untreated – all stages with therapy indication
- Prior therapy

**CLL**

**HCL/T-PLL**

\(^1\) Age ≥ 18 years

\(^2\) See Physical Activity, Nutrition, and Tobacco Cessation algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

\(^3\) Consider MD Anderson approved biomarkers

\(^4\) See Leukemia Clinical Trials

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**TREATMENT**

- **Standard of care:**
  - Young/fit IGVH – mutated
    - Fludarabine, cyclophosphamide and rituximab (FCR)
  - Young/fit IGVH – unmaturated or elderly/comorbidities
    - Acalabrutinib (with or without obinutuzumab)
    - Ibrutinib
    - Venetoclax plus obinutuzumab
  - Del(17p) (any age)
    - Ibrutinib

- **Relapsed/refractory non-del(17p):**
  - Acalabrutinib (with or without rituximab)
  - Ibrutinib
  - Venetoclax and rituximab
  - Idealisib and rituximab

- **Del(17p):**
  - Acalabrutinib (with or without rituximab)
  - Ibrutinib
  - Venetoclax (with or without rituximab)

- **Hairy cell leukemia:**
  - Phase II clinical trial\(^4\) of cladribine and rituximab

- **Relapsed hairy cell leukemia:**
  - Cladribine or pentostatin plus rituximab
  - Ibrutinib
  - Moxetumomab pasudotox-tdfk and rituximab
  - Venetoclax and rituximab

- **T-cell prolymphocytic leukemia:**
  - Alemtuzumab

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**SURVEILLANCE**

- Surveillance as per treatment plan

**Disclaimer:** This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

**Note:** Consider Clinical Trials as treatment options for eligible patients. Leukemia patients should be referred and treated at a comprehensive cancer center.

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SUGGESTED READINGS


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DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Leukemia Center Faculty workgroup at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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