

Acute Lymphoblastic Leukemia and Lymphoblastic Lymphoma (ALL) – Adult¹

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¹ Age ≥ 18 years old

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Note: Consider clinical trials as treatment options for eligible patients. Stem Cell Transplant (SCT) guidelines are not included with this algorithm. Leukemia patients should be referred and treated at a Comprehensive Cancer Center.

PATIENT PRESENTATION^{1,2}

Philadelphia negative
 precursor B (Pre B)
 lymphoblastic leukemia/
 lymphoma

CD19, CD10 (±),
 CD20 (±), CD22 (±)

MPO (-)
 TdT (+)

BCR::ABL1 (-)

TREATMENT

Age ≥ 60 years

- Consider clinical trial³:
 - Mini-HCVD plus inotuzumab ozogamicin⁴ plus blinatumomab with or without rituximab⁵

Age 18 - 59 years

- Hyper-CVAD with or without rituximab⁶ **or**
- Consider clinical trial³:
 - Hyper-CVAD plus inotuzumab ozogamicin plus blinatumomab with or without rituximab or ofatumab⁶

ASSESSMENT OF RESPONSE

Complete remission⁷?

Yes

No

- Consolidation/maintenance
- Blinatumomab **or** inotuzumab ozogamicin

- Salvage therapy clinical trial^{3,8}
- Chimeric antigen receptor (CAR) T-cell therapy
- Blinatumomab with or without chemotherapy
- Inotuzumab ozogamicin
- Discuss Goal Concordant Care (GCC) with patient or if clinically indicated, with Patient Representative⁹

POST-REMISSION THERAPY/MINIMAL RESIDUAL DISEASE

Surveillance

Surveillance

¹ See [Physical Activity](#), [Nutrition](#), and [Tobacco Cessation](#) algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

² Consider [MD Anderson approved biomarkers](#)

³ See [Leukemia Clinical Trials](#)

⁴ Mini-HCVD (cyclophosphamide and dexamethasone at 50% dose reduction, no anthracycline, methotrexate at 75% dose reduction, cytarabine at 0.5 g/m² for 4 doses) plus inotuzumab ozogamicin

⁵ Rituximab if CD20 ≥ 20%

⁶ Hyper-CVAD (hyper-fractionated cyclophosphamide, vincristine, doxorubicin, dexamethasone); rituximab if CD20 ≥ 20%

Hyper-CVAD (hyper-fractionated cyclophosphamide, vincristine, doxorubicin, dexamethasone); ofatumumab if CD20 ≥ 1%

⁷ Failure after induction with hyper-CVAD based regimen means no response after 2 cycles of chemotherapy

⁸ For late relapses (relapse > 3 years from initial diagnosis), the same induction regimen may be considered for salvage therapy

⁹ GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to [GCC home page](#) (for internal use only).

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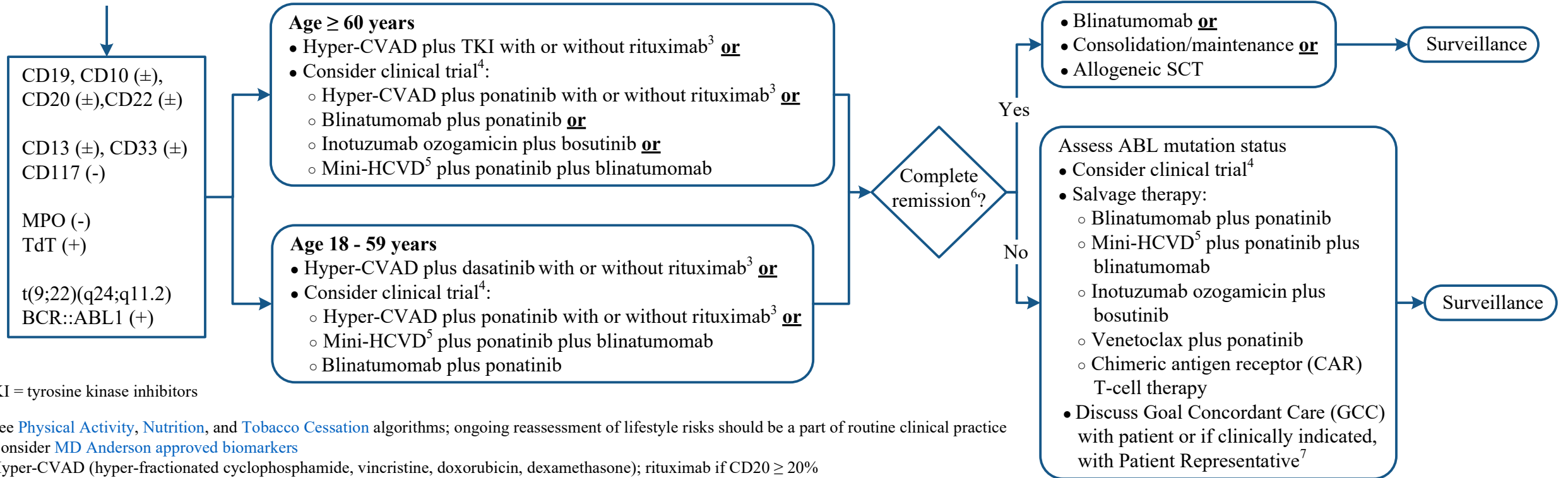
PATIENT PRESENTATION^{1,2}

TREATMENT

ASSESSMENT OF RESPONSE

POST-REMISSION THERAPY

Philadelphia chromosome (Ph) positive acute lymphoblastic leukemia



TKI = tyrosine kinase inhibitors

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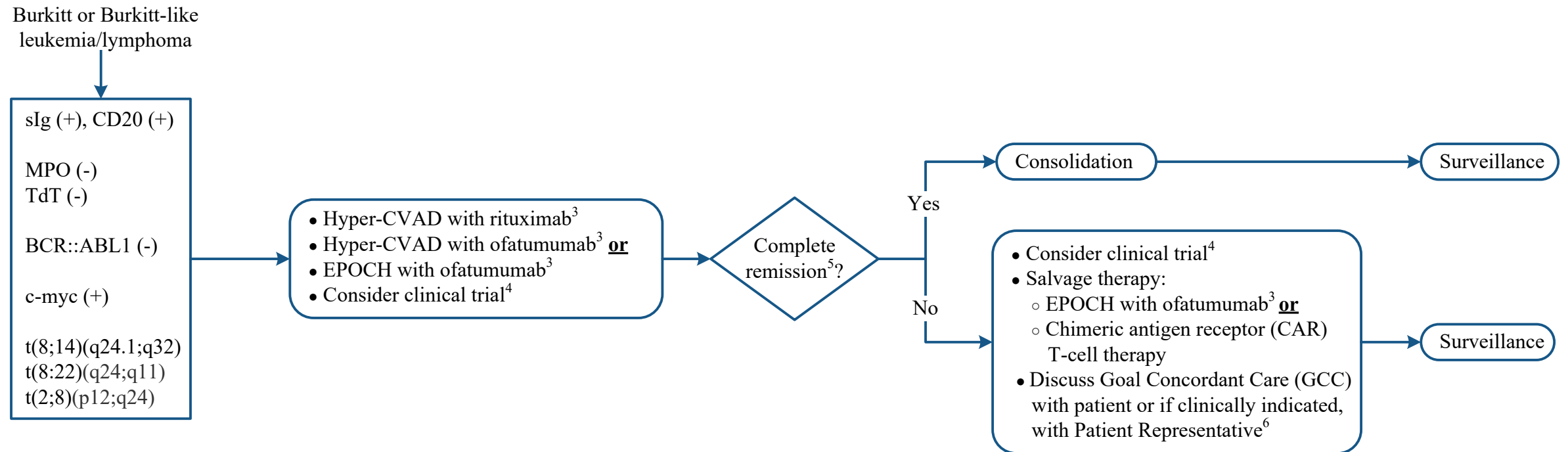
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PATIENT PRESENTATION^{1,2}

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³ Hyper-CVAD (hyper-fractionated cyclophosphamide, vincristine, doxorubicin, dexamethasone) plus rituximab
 Hyper-CVAD (hyper-fractionated cyclophosphamide, vincristine, doxorubicin, dexamethasone) plus ofatumumab
 EPOCH (etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin) plus ofatumumab

⁴ See [Leukemia Clinical Trials](#)

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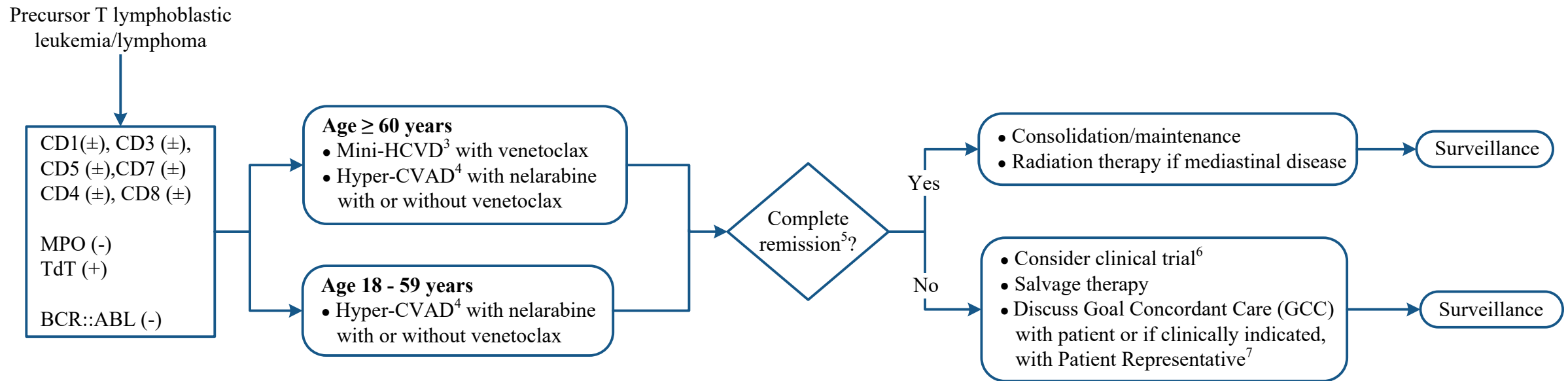
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DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Leukemia Center Faculty 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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