Chronic Myelogenous Leukemia – Adult (Age ≥ 18 years)

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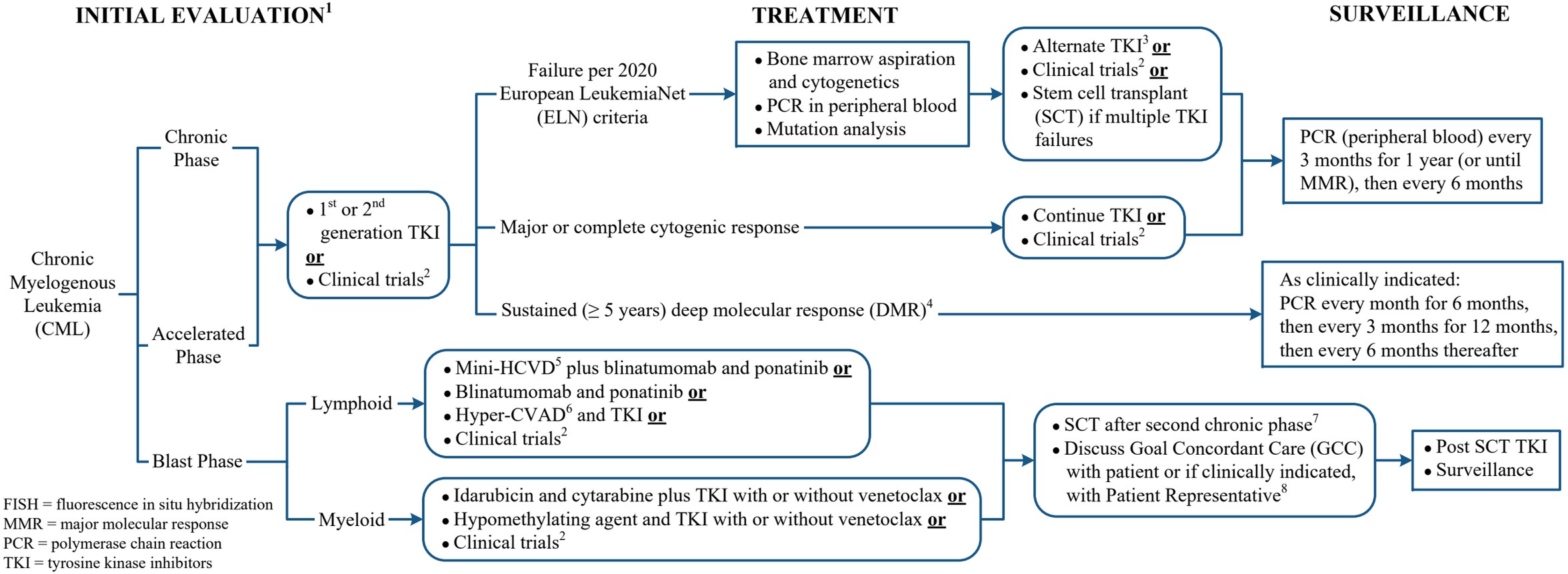
Notes: Consider Clinical Trials as treatment options for eligible patients. Leukemia patients should be referred and treated at a comprehensive cancer center.



FISH = fluorescence in situ hybridization
MMR = major molecular response
PCR = polymerase chain reaction
TKI = tyrosine kinase inhibitors

[1] See Physical Activity, Nutrition, Obesity Screening and Management, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice
[2] See Leukemia Clinical Trials
[3] If T315I, consider ponatinib
[4] DMR is defined as MR4.0: *BCR::ABL1* (IS) ≤ 0.01% or MR4.5: *BCR::ABL1* (IS) ≤ 0.0032%
[5] Mini-HCVD (cyclophosphamide and dexamethasone at 50% dose reduction, no anthracycline, methotrexate at 75% dose reduction, cytarabine at 0.5 gram/m^2 for 4 doses)
[6] Hyper-CVAD = hyper-fractionated cyclophosphamide, vincristine, doxorubicin, and dexamethasone
[7] In the case of de novo CML-lymphoid blast phase, consider deferring SCT in patients who achieve minimal residual disease (MRD)–negative remission by next generation sequencing (NGS)
[8] 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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SUGGESTED READINGS

Hochhaus, A., Baccarani, M., Silver, R. T., Schiffer, C., Apperley, J. F., Cervantes, F., . . . Hehlmann, R. (2020). European LeukemiaNet 2020 recommendations for treating chronic myeloid leukemia. *Leukemia, 34*(4), 966-984. https://doi.org/10.1038/s41375-020-0776-2

Jabbour, E., & Kantarjian, H. (2022). Chronic myeloid leukemia: 2022 update on diagnosis, therapy and monitoring. *American Journal of Hematology, 97*(9), 1236-1256 https://doi.org/10.1002/ajh.26642

MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy
Advance Care Planning (ACP) Conversation Workflow (ATT1925)

National Comprehensive Cancer Network. (2023). *Chronic Myeloid Leukemia* (NCCN Guideline Version 2.2024). Retrieved from https://www.nccn.org/professionals/physician_gls/pdf/cml.pdf

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DEVELOPMENT CREDITS

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

Core Development Team Leads

Alessandra Ferrajoli, MD (Leukemia)
Ghayas Issa, MD (Leukemia)
Elias Jabbour, MD (Leukemia)
Hagop M. Kantarjian, MD (Leukemia)
Koji Sasaki, MD (Leukemia)

Workgroup Members

Hussein Abbas, MD, PhD (Leukemia)
Yesid Alvarado, MD (Leukemia)
Michael Andreeff, MD, PhD (Leukemia)
Kapil Bhalla, MD (Leukemia)
Gautam Borthakur, MBBS (Leukemia)
Prithviraj Bose, MD (Leukemia)
Jan Burger, MD (Leukemia)
Kelly Chien, MD (Leukemia)
Naval Daver, MD (Leukemia)
Courtney DiNardo, MD (Leukemia)
Wendy Garcia, BS♦
Guillermo Garcia-Manero, MD (Leukemia)
Jo Ishizawa, MD, PhD (Leukemia)
Nitin Jain, MBBS (Leukemia)
Tapan Kadia, MD (Leukemia)
Steven Kornblau, MD (Leukemia)
Abhishek Maiti, MBBS (Leukemia)
Lucia Masarova, MD (Leukemia)
Deborah McCue, PharmD (Pharmacy Clinical Programs)
Guillermo Montalban-Bravo, MD (Leukemia)
Maro Ohanian, DO (Leukemia)
Naveen Pemmaraju, MD (Leukemia)
Farhad Ravandi-Kashani, MD (Leukemia)
Nicholas Short, MD (Leukemia)
Koichi Takahashi, MD (Leukemia)
Mary Lou Warren, DNP, APRN, CNS-CC♦
William Wierda, MD, PhD (Leukemia)
Musa Yilmaz, MD (Leukemia)

♦Clinical Effectiveness Development Team

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