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NCCN Task Force Report: Tyrosine Kinase Inhibitor Therapy Selection in the Management of Patients With Chronic Myelogenous Leukemia

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Continuing Education Information

Target Audience

This educational program is designed to meet the needs of oncologists, hematologists, advanced practice nurses, and other clinical professionals who treat and manage patients with cancer.

Educational Objectives

After completion of this CME/CE activity, participants should be able to:

- Review the current standard of care in patients with CML.
- Discuss the clinical data supporting the use of second generation TKIs for newly diagnosed patients with CML.
- Discuss the importance of monitoring response and mutational analysis.
- Describe the role of allogeneic stem cell transplant in the management of patients with CML.
- Summarize the NCCN Task Force recommendations for TKI therapy selection.

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Disclosure of Affiliations and Significant Relationships

Dr. O'Brien has disclosed that she has no financial interests, arrangements, or affiliations with the manufacturer of products and devices discussed in this report or who may financially support the educational activity.

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Post-test

- 1. Which of the following best describes the NCCN task force recommendation for patients with newly diagnosed chronic phase (CP) chronic myelogenous leukemia (CML)?
 - a. Imatinib, 400 mg daily
 - b. Switch to dasatinib or nilotinib if patients are intolerant to imatinib
 - c. Consider dasatinib or nilotinib for patients with intermediate- or high-risk
 - d. All of the above
- Bone marrow cytogenetics is used to monitor response to tyrosine kinase inhibitor (TKI) therapy. Which of the following best describes the NCCN task force recommendation for when monitoring should occur?
 - a. At diagnosis and every 3 months thereafter in responding patients
 - b. At diagnosis and every 6 months thereafter
 - c. Rising level of BCR-ABL transcript in patient with a major molecular response (MMR)
 - d. All of the above
- 3. Dasatinib is more active than nilotinib against P-loop mutations in imatinib-resistant patients.
 - a. True
 - b. False
- 4. Which of the following best describes the NCCN task force recommendations for second-line therapy in patients for whom treatment with 400 mg of imatinib fails?
 - a. Mutation testing and switch to dasatinib or nilotinib
 - b. Dose escalation of imatinib to 800 mg if tolerated
 - c. Allogeneic hematopoietic stem cell transplantation (HSCT)
 - d. All of the above
- Dose escalation of imatinib is an option for patients with suboptimal cytogenetic response to standarddose imatinib.
 - a. True
 - b. False

- 6. Which of the following is true regarding the recommended dose of dasatinib for patients resistant or intolerant to imatinib?
 - a. 100 mg once daily for patients with CP-CML
 - b. 140 mg once daily for patients with disease progression to accelerated- or blast-phase CML
 - c. Both of the above
 - d. None of the above
- 7. Which of the following mutations are resistant to nilotinib?
 - a. T315I
 - b. E255K/V
 - c. F359V/C
 - d. All of the above
- 8. Edema and pleural effusion are the most common nonhematologic toxicities associated with nilotinib.
 - a. True
 - b. False
- 9. Which of the following pretransplant variables does not have an adverse effect on the outcome of allogeneic HSCT?
 - a. Disease phase
 - b. C-reactive protein
 - c. Prior TKI therapy
 - d. All of the above
- 10. Allogeneic HSCT is the recommended second-line therapy for patients with disease progression to accelerated or blast phase on imatinib.
 - a. True
 - b. False

To Receive Credit

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