

## Timing of allo-HCT in CMML

To obtain credit, you should first read the journal article. After reading the article, you should be able to answer the following, related, multiple-choice questions. To complete the questions (with a minimum 75% passing score) and earn continuing medical education (CME) credit, please go to <http://www.medscape.org/journal/blood>. Credit cannot be obtained for tests completed on paper, although you may use the worksheet below to keep a record of your answers. You must be a registered user on <http://www.medscape.org>. If you are not registered on <http://www.medscape.org>, please click on the "Register" link on the right hand side of the website. Only one answer is correct for each question. Once you successfully answer all post-test questions you will be able to view and/or print your certificate. For questions regarding this activity, contact the accredited provider, [CME@medscape.net](mailto:CME@medscape.net). For technical assistance, contact [CME@medscape.net](mailto:CME@medscape.net). American Medical Association Physician's Recognition Award (AMA PRA) credits are accepted in the US as evidence of participation in CME activities. For further information on this award, please go to <https://www.ama-assn.org>. The AMA has determined that physicians not licensed in the US who participate in this CME activity are eligible for *AMA PRA Category 1 Credits™*. Through agreements that the AMA has made with agencies in some countries, AMA PRA credit may be acceptable as evidence of participation in CME activities. If you are not licensed in the US, please complete the questions online, print the AMA PRA CME credit certificate, and present it to your national medical association for review.

Robin M, de Wreede LC, Padron E, Bakunina K, Fenaux P, Koster L, Nazha A, Beelen DW, Rampal RK, Sockel K, Komrokji RS, Gagelmann N, Eikema D-J, Radujkovic A, Finke J, Potter V, Killick SB, Legrand F, Solary E, Broom A, Garcia-Manero G, Rizzoli V, Hayden P, Patnaik MM, Onida F, Yakoub-Agha I, Itzykson R. Role of allogeneic transplantation in chronic myelomonocytic leukemia: an international collaborative analysis. *Blood*. 2022;140(12): 1408-1418.

**1. Your patient is a 64-year-old man with chronic myelomonocytic leukemia (CMML). According to the retrospective cohort study by Robin and colleagues, which of the following statements about the association of allogeneic hematopoietic cell transplantation (allo-HCT) and other factors with survival and other outcomes in CMML is correct?**

- In univariable analysis, patients with lower-risk CMML had 5-year overall survival (OS) of 20% (95% CI: 12, 33) with allo-HCT vs 42% (95% CI: 35, 49) without allo-HCT ( $P < .001$ )
- In univariable analysis, higher-risk patients had significantly higher 5-year OS with allo-HCT than without allo-HCT
- Posttransplant OS was significantly higher in patients transplanted from a human leukocyte antigen–matched donor than in patients transplanted with other donor types
- In the International CMML Dataset cohort (censored at allo-HCT), 5-year cumulative incidences of acute myeloid leukemia (AML) did not differ between patients with lower and with higher CMML risk

**2. According to the retrospective cohort study by Robin and colleagues, which of the following statements about the effect of timing of allo-HCT on the association of allo-HCT and other factors with survival and other outcomes in CMML is correct?**

- In multivariable analysis of lower-risk patients, performing allo-HCT before transformation to AML did not significantly affect risk for death within 2 years of transplantation
- In multivariable analysis of higher-risk patients, allo-HCT significantly increased the risk for death by greater than threefold in the first 4 years after transplant
- In multistate models, performing allo-HCT before AML transformation reduced OS in patients with lower-risk CMML
- In multistate models, performing allo-HCT before AML transformation showed a survival benefit in women but not in men with higher-risk CMML

**3. According to the retrospective cohort study by Robin and colleagues, which of the following statements about clinical implications of the association of allo-HCT and other factors with survival and other outcomes in CMML is correct?**

- In the multistate model, men with higher-risk CMML benefit from allo-HCT only when transplant is delayed
- The study proves that allo-HCT has a large survival benefit in patients who have transformed to AML
- The findings suggest that transplantation should be delayed until transformation to AML occurs
- Performing allo-HCT before transformation decreases life expectancy in lower-risk patients but may be considered in higher-risk patients