

## Peer Review File

Article information: <https://dx.doi.org/10.21037/ace-22-12>

### Reviewer A

The authors found that academic centers and high volume facilities had better OS and greater likelihood of treatment with chemotherapy or allogeneic hematopoietic stem cell therapy (HSCT). Black race and Hispanic ethnicity were associated with differences in TTT, OS, and receipt of different therapies, which correlated with changes in outcomes. Comments for improvement are included below.

Major:

Comment 1: A schematic figure outlining the patient selection criteria would be helpful for the readers.

Reply 1: Thank you for this comment, we agree. A schematic was created to outline patient selection criteria and missing data.

Changes in the text: See separate "Figure 1" document.

Comment 2: The better overall survival for Hispanic AML patients is consistent with the Hispanic paradox. However, multiple groups of have reported that Hispanic AML patients diagnosed near the US/Mexico border have worse outcomes. Are you able to distinguish care centers based on regional location in your database? Do Hispanic AML patients diagnosed near border regions have worse outcomes compared with Hispanic AML patients diagnosed in non-border regions?

Reply 2: This is an important point, and we appreciate this insightful comment. Our data does not allow us to isolate on the state level to allow us to look at border states (CA, TX, AZ and NM) specifically and exclusively. States were grouped together based on region, and border states were included in the Mountain+ West (MW) regions (N=18,048) while non-border states were included in the Central +East (CE) regions (N= 93,861). Comparing CE regions to MW regions, OS was worse in CE regions compared to MW regions (HR of 1.06, CI 1.04-1.08, P <0.001). TTT was not statistically significant. Based on this, Hispanic patients in border regions have better OS than those from non-border regions, however the nature of the dataset precludes us from assessing the comment on the more granular level.

Changes in the text: Thank you for this insightful comment. Since granular data related to this question was unavailable as described above, we did not make any modifications to the text.

Comment 3: What was the age at diagnosis for Black, Hispanic, and non-Hispanic White AML patients? Were there any differences between groups?

Reply 3: This is an excellent question. There was a statistically significant difference in the median age of diagnosis among Hispanic Whites (55 years), Hispanic Blacks (57 years), non-Hispanic Blacks (60 years), and non-Hispanic

Whites (67 years).

Changes in the text: Included in results section under baseline, characteristics.  
Page 8, lines 157-159.

Comment 4: Tables 1-3 are difficult to follow. Please revise the tables to include just three columns and not six. Or somehow design the tables to distinguish one side from the other side.

Reply 4: Thank you for pointing this out. Tables 1-3 have been redone to have only 3 columns.

Changes in the text: See separate "Tables 1-4" document with tables 1-3 redone.

Comment 5: Supplementary Tables 1-10: The tables are not called out in order throughout the text. Also, it is difficult to make sense of the data, as it seems more like a data dump than a manuscript. Please reconsider the data that are most important to the final conclusions of the manuscript and trim down from there.

Reply 5: Important aspects of supplementary tables touched on in the results could not be consolidated into a single table so supplementary tables were deleted altogether.

Changes in the text: Supplementary tables file removed.

Minor:

Comment 1: Figure 1: Should be labeled with panels A-D. Please revise the legend accordingly. The text on all of the figures should be increased in size and resolution.

Reply 1: Thank you for pointing this out. Former figure 1 (now Figure 2) has been redone with labels A-D and an increase in size and resolution of the text in the figure. The legend has been revised to reflect this change.

Changes in the text: See separate "Figure 2" document.

Comment 2: The authors should cite recent reports outlining AML health disparities in the Black and/or Hispanic population:

a. PMID: 33156479

b. PMID: 33616915

c. PMID: 35788257

d. PMID: 34826414

Reply 2: Thank you for this suggestion. All references suggested above are included in the text as advised.

Changes in the text:

a. PMID: 33156479

Paulozzi LJ, McDonald JA, Sroka CJ. A Disparity beneath a Paradox: Cancer Mortality among Young Hispanic Americans in the US-Mexico Border Region. *J Racial Ethn Health Disparities*. 2021;8(6):1556-62-> Page 14, lines 305-308, reference 53

b. PMID: 33616915

Bencomo-Alvarez AE, Gonzalez MA, Rubio AJ, Olivas IM, Lara JJ, Padilla O, et al.

Ethnic and border differences on blood cancer presentation and outcomes: A Texas population-based study. *Cancer*. 2021;127(7):1068-79 -> Page 14, lines 308-309, reference 50

c. PMID: 35788257

Larkin KT, Nicolet D, Kelly BJ, Mrózek K, LaHaye S, Miller KE, et al. High early death rates, treatment resistance, and short survival of Black adolescents and young adults with AML. *Blood Adv*. 2022;6(19):5570-81-> Page 13, lines 285-288, reference 47

d. PMID: 34826414

Bhatnagar B, Eisfeld AK. Racial and ethnic survival disparities in patients with haematological malignancies in the USA: time to stop ignoring the numbers. *Lancet Haematol*. 2021;8(12):e947-e54 -> Page 13, lines 283-284, reference 46

Comment 3: Line 63: Please spell out NCDB upon first usage. All abbreviations that are spelled out in the abstract should be properly spelled out within the main text.  
Reply 3: Modified as advised, and spelt out overall survival, and allogeneic hematopoietic stem cell transplant which were also abbreviated in the introduction previously.

Changes in the text: Page 4, lines 74, 77-78

#### **Reviewer B**

Comment 1. Recommend adding a comma to all the number of patients "124,988" in the results and baseline characteristics.

Reply 1: Modified text as advised for total number of patients as well for all other similar numbers.

Changes in the text: Page 8, lines 157-165

Comment 2: Recommend capitalizing s in AIDs in "Variables"

Reply 2: Modified text as advised.

Changes in text: Page 6, line 111