

Reviewer #1:

Specific Comments to Authors: Anorectal melanoma incidences are exceptionally uncommon, as evidenced by Bleicher J, et al., identified in the present study only 24 cases over a 20-year period from seven of their participating institutes in the Salt Lake City, Utah area. The prevalence of ARM is more in women than men, and it is supported by these authors in this analysis also, as they found 16 females and 8 male cases. This is supported by the studies from different parts of the world, included in literature review analysis as they have presented in Table-3. In most of the cases with anorectal melanomas already have distant metastases at the time of presentation, the prognosis of this disease is poor with a median post-treatment survival time of less than 2 years and the 5-year survival rate of less than 20%. Thickness of the tumor appears to be correlated with the clinical outcome in anorectal melanoma. Thickness of 4.0 mm or more is more prone to relapse, metastasis, and low disease-free survival rate. In some case anorectal melanomas were misdiagnosed as other diseases also. Surgery in combination with radiotherapy and adjuvant immunotherapy, like interferon, was reported to be a choice of treatment for anorectal melanoma if the tumor is not metastasized. Evidence on optimal treatment is limited and surgical management varies widely. The authors collected the data of from various Cohort studies regarding the treatment modalities of ARM, and presented clearly in this manuscript. Their analysis helped in recommending that surgical management should aim to minimize morbidity in ARM patients. The methods of data analysis are very clear, and the results are presented well. The manuscript is written clearly and it's in acceptable form without any major changes.

- We thank Reviewer #1 for the thorough review of our manuscript. The summary is concise and accurate.

Reviewer #2:

Specific Comments to Authors: In the manuscript “Trends in the Management of Anorectal Melanoma: A Multi-institutional Retrospective Study and Review of the World Literature”, the authors tried to update the understanding of outcomes for patients with ARM and analyze management trends around the world. They performed a multi-institutional, retrospective study of patients treated for ARM and a literature review to assess trends in surgical management and outcomes. They conclude that there is wide variation in the management of ARM and survival outcomes remain poor regardless of approach and surgical management should aim to minimize morbidity. The topic of this work is interesting.

We thank Reviewer #2 for the helpful questions and comments on improving our manuscript. Please see below for response to each question:

1. The authors conclude surgical management should aim to minimize morbidity. I suggest the authors give more details on the relationship between surgical management and morbidity in both their retrospective study and literature review.
 - Data on postoperative morbidity is not well captured in our retrospective cohort and therefore we cannot provide accurate information on surgical morbidity for these patients. This limitation is partly attributable to travel distance as some patients sought postoperative care at facilities other than where the index surgery was performed. We acknowledge this limitation of the study. We have added greater

- detail about the morbidity associated with both APR and WE in the discussion section however, based on other cohorts presented in the literature. This is presented in the third paragraph of the Discussion section.
2. The authors should show data on the complication of the surgical treatment and non-operative therapies.
 - Please see our response to comment #1 above.
 3. We have included a more thorough discussion of complications of ARM management in the third paragraph of the discussion section. Is it possible the authors give their evaluation and look forward to future strategies for ARM in the Discussion?
 - We have now included a discussion of other therapies for ARM. This is presented as the second to last paragraph of the discussion section. We review the utility of checkpoint inhibitor therapy and other targeted therapies that have been used for ARM treatment.
 - We also added a sentence to the conclusion: “With no clear advantage to APR, surgical management should aim to minimize morbidity” to state our opinion on surgical management of APR. There is also a similar sentence in the Conclusion section of the Abstract.