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2022 ASRF Schedule

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Apr 7th, 9:00 AM - 12:00 PM

### How Low Can We Go?: Comparing Long-term Oncologic Outcomes for APR and LAR in Very Low Rectal Cancer

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Bethurum, Alva J. B.S.; Hawkins, Alexander T. MD, MPH; Balch, Glen C. MD, MBA, FACS; Regenbogen, Scott E. MD, MPH; Holder-Murray, Jennifer MD; Abdel-Misih, Sherif MD; Wise, Paul E. MD; and Muldoon, Roberta MD, "How Low Can We Go?: Comparing Long-term Oncologic Outcomes for APR and LAR in Very Low Rectal Cancer" (2022). *Appalachian Student Research Forum & Jay S. Boland Undergraduate Research Symposium*. 94.

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# How Low Can We Go? Comparing Long Term Oncologic Outcomes for APR and LAR in Very Low Rectal Cancer

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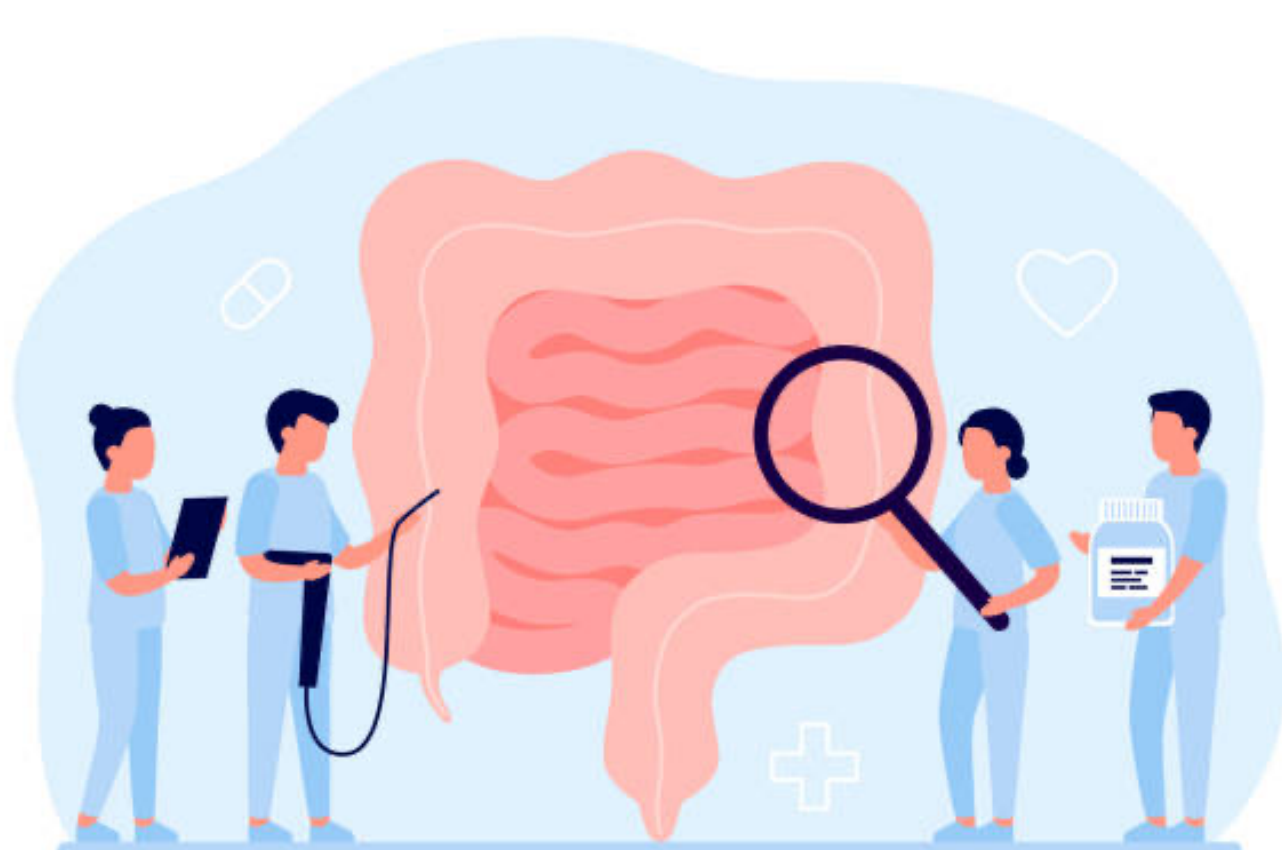


Colorectal Research Center

VANDERBILT UNIVERSITY  
MEDICAL CENTER

## Background

The decision to pursue APR or LAR for very low rectal cancer is challenging. Determination of approach is generally based on individual surgeon preference.



## Objective

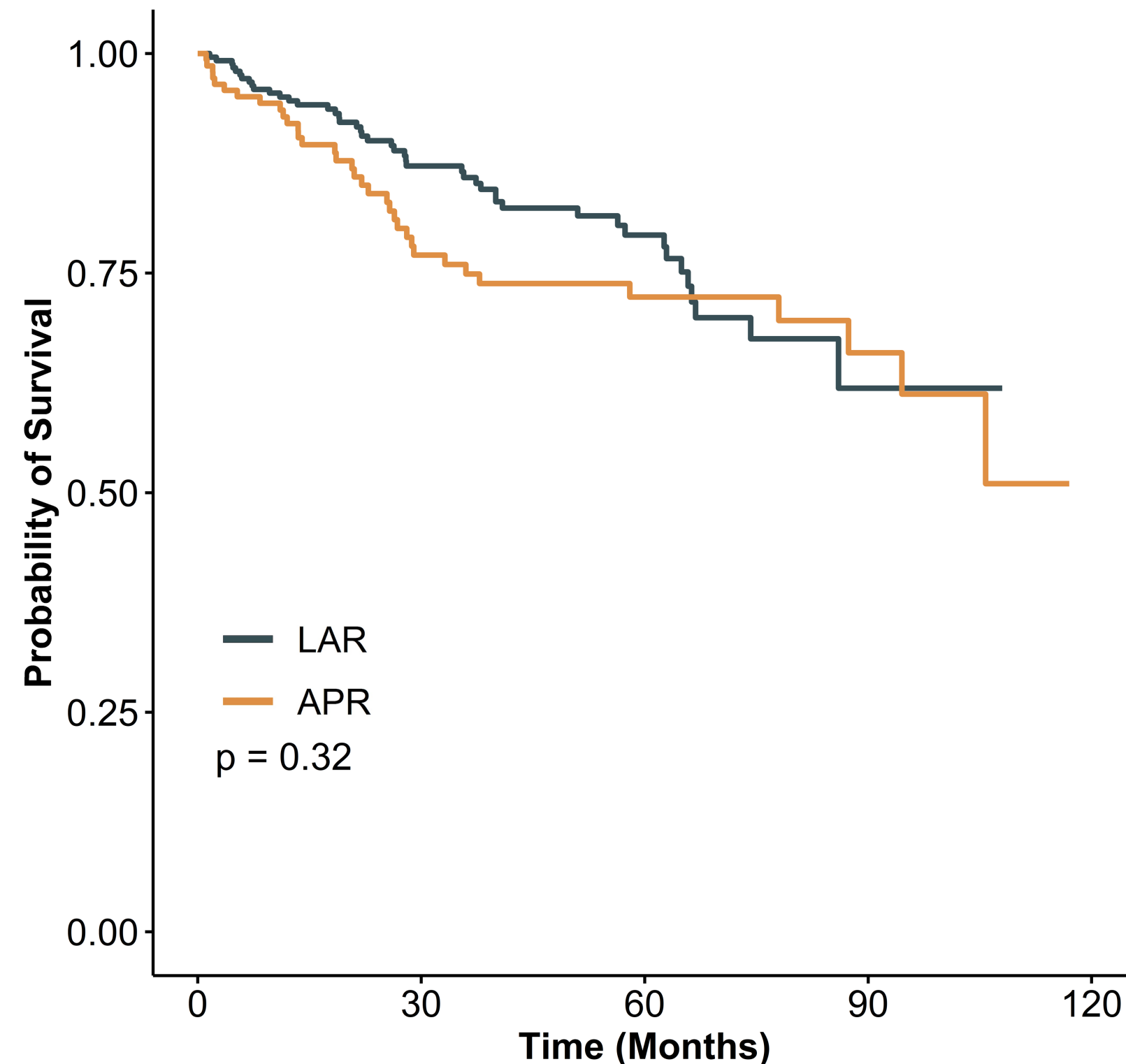
Determine differences in long-term oncologic outcomes between patients undergoing abdominoperineal versus low anterior resection for very low rectal cancer.

## Methods

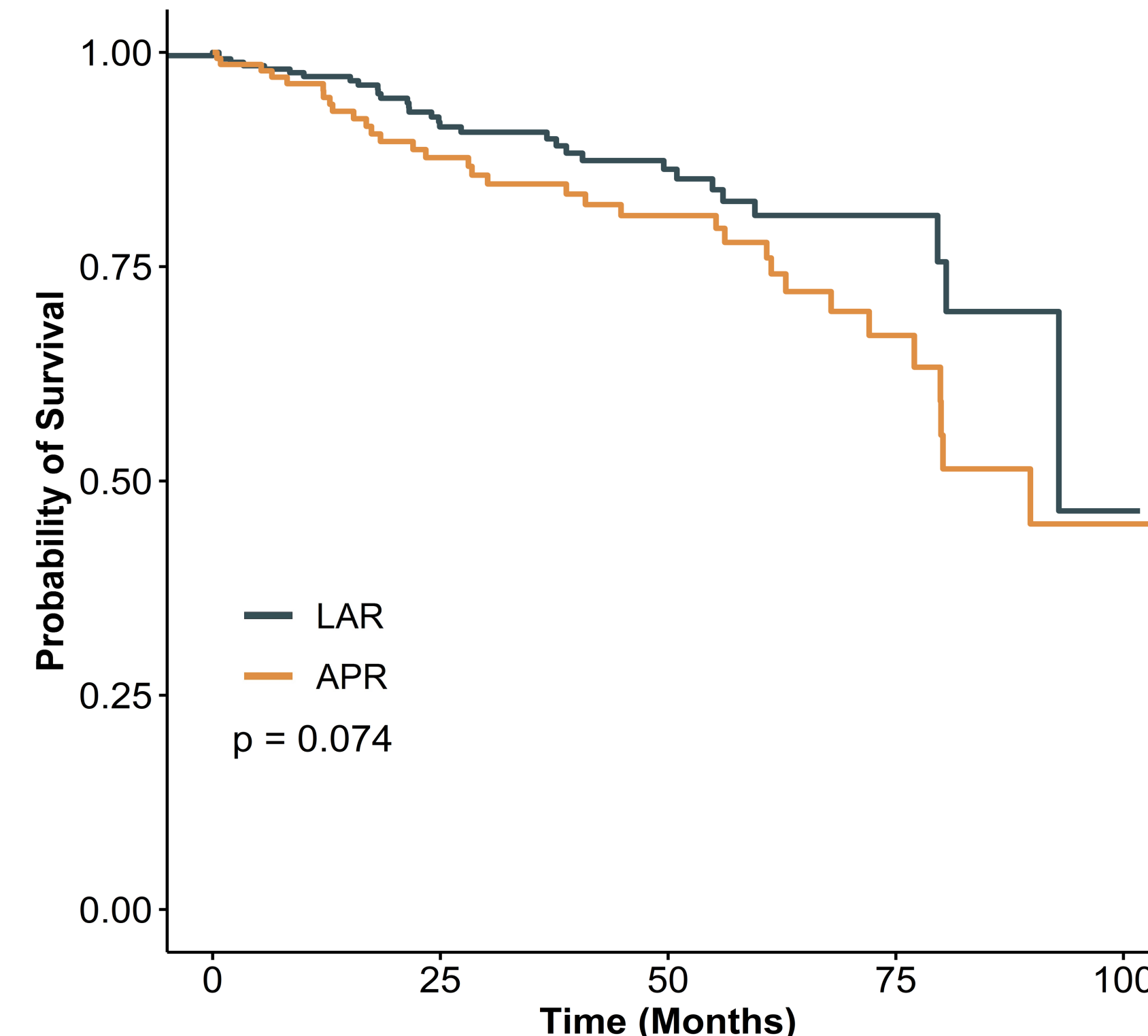
Retrospective analysis of the US Rectal Cancer Collaborative Database identified patients with Stage I-III tumors <5 cm from the anorectal junction with no sphincter involvement who underwent R0 APR or LAR between 2010 and 2016.

## Results

Kaplan-Meier Plot of Disease-Free Survival, Operation Type



Kaplan-Meier Plot of Overall Survival, Operation Type



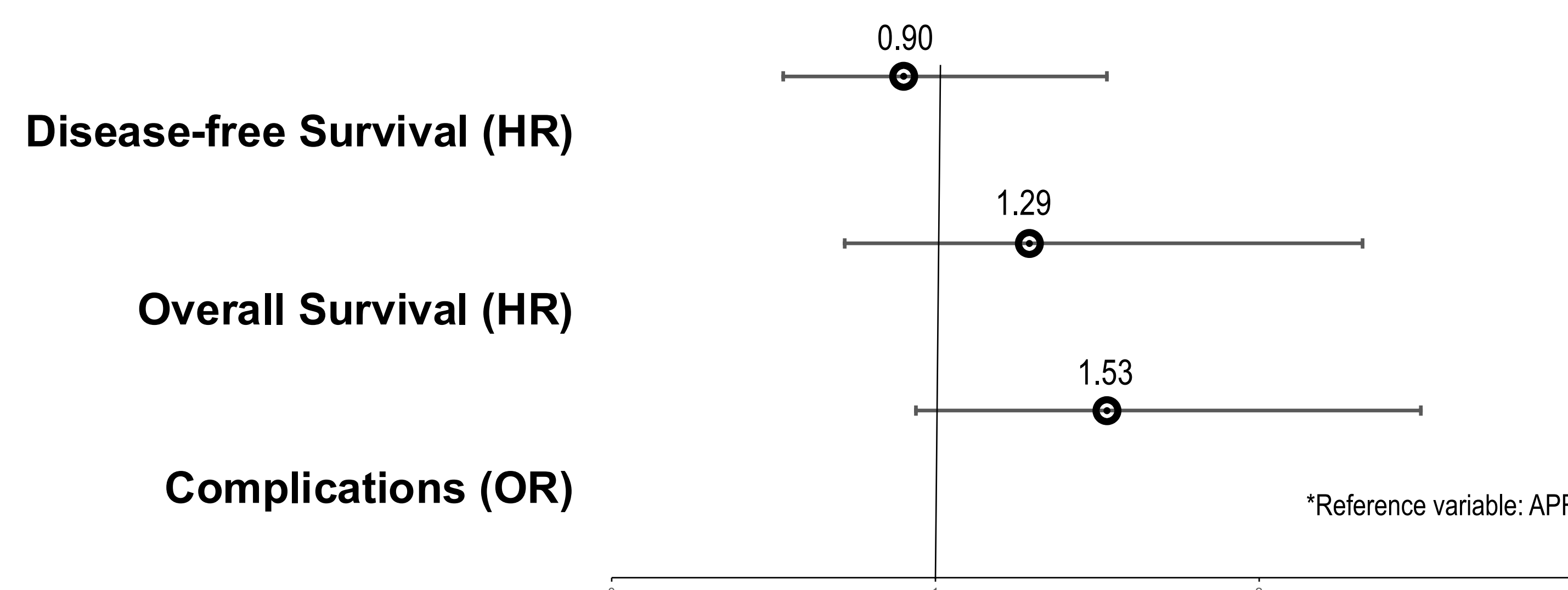
## Discussion

**431 patients** met inclusion criteria and were included in an adjusted regression analysis for age, gender, BMI, ASA class, and pathologic stage.

Cox proportional hazards models demonstrated **no statistical significance in disease free survival** ( $p=0.7$ ) between the two surgical approaches.

Further analysis showed **no statistical significance** between secondary outcome measures of **overall survival** ( $p=0.4$ ), **length of stay** ( $p=0.55$ ), and **complications** ( $p=0.09$ ).

### HR and OR for Primary and Secondary Outcomes



## Conclusion

Overall, similar oncologic outcomes are observed in very low rectal cancer treated with either abdominoperineal or low anterior resection.

Additionally, no significant difference in overall survival, complications, or length of stay was observed in patients treated with either operation.

## Implications

With comparable oncologic results, quality of life and economic factors may play a role in the development of a patient's care plan.

To be presented on 3 May 2022, Tampa, FL, ASCRS Annual Meeting, eP478

