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# **Females and Males Achieve Similar 10-Year Outcomes Following Hip Arthroscopy for Impingement**

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# Disclosures



**Jordan H. Larson:** Nothing to Disclose.

**Corey Beals:** Nothing to Disclose.

**Daniel J. Kaplan:** Nothing to Disclose.

**Thomas W. Fenn:** Nothing to Disclose.

**Christopher M. Brusalis:** Nothing to Disclose.

**Sachin Allahabadi:** Nothing to Disclose.

**Vince K. Morgan:** Nothing to Disclose.

**Shane J. Nho:** AOSSM, Arthrex, AANA, Mitek, Ossur, Springer, Stryker.

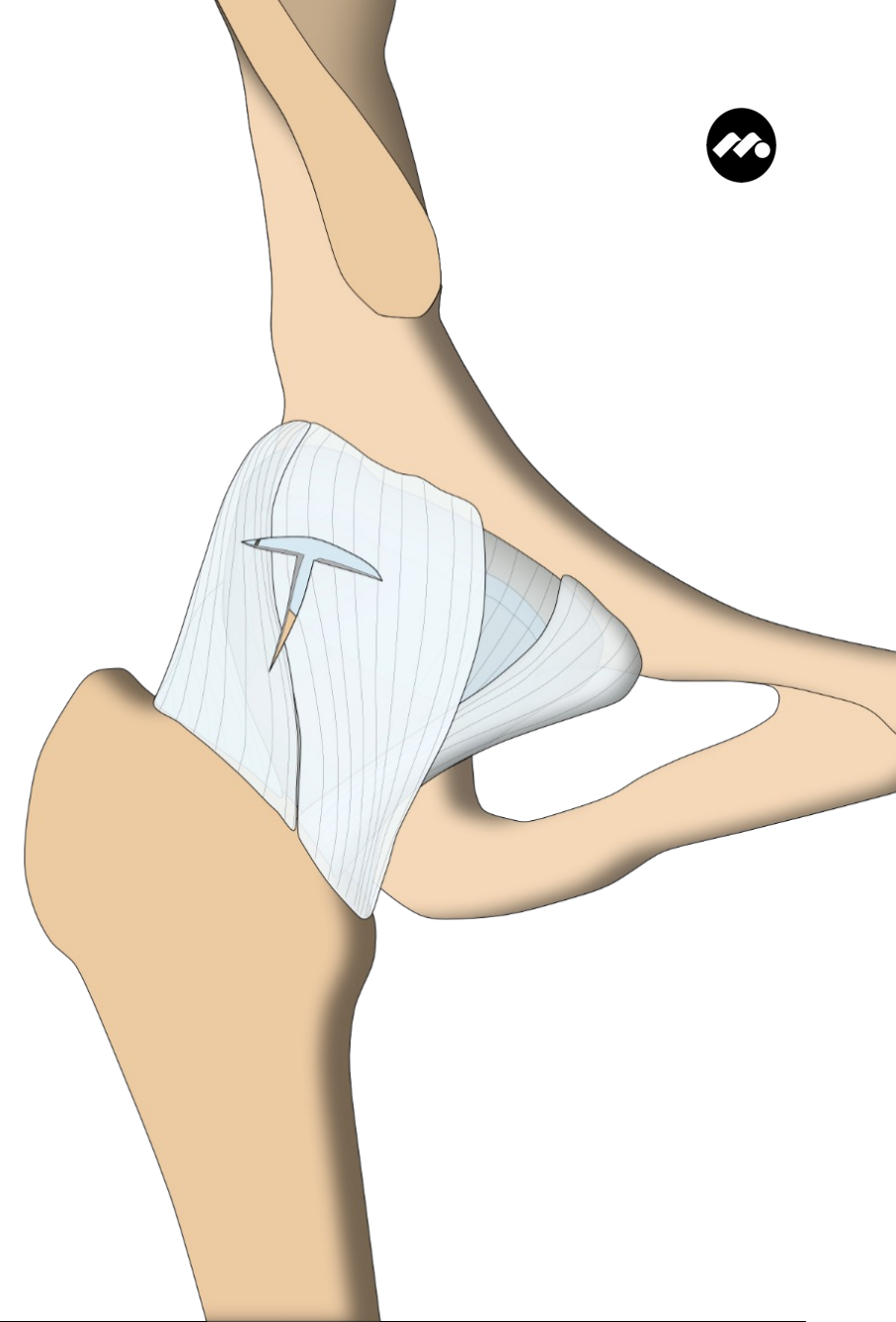
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# Introduction

**Male and female** patients have shown **successful outcomes** after **primary hip arthroscopy** for femoroacetabular impingement syndrome (**FAIS**) 2-year and 5-year follow-up.<sup>1,2</sup>

**Female** patients have been shown to achieve a greater **magnitude of improvement** following hip arthroscopy for FAIS.<sup>3</sup>

**Limited studies** compare outcomes between male and female patients at **minimum 10-year** follow-up.



# Objectives



- 1) To compare patient-reported outcomes (**PROs**) and achievement of clinically significant outcomes (**CSOs**) between **male and female** patients **10 years** after hip arthroscopy for FAIS.
- 2) To compare **reoperation-free survivorship** between groups.

# Hypotheses

- 1) Male and female patients would show **comparable** 10-year PROs and CSOs.
- 2) Both groups would demonstrate **comparable** reoperation-free survivorship.

# Methods



## Patient Selection

- Inclusion criteria:
  - Hip arthroscopy for FAIS between Jan. 2012 and Feb. 2013.
    - *All patients underwent contemporary hip arthroscopy with chondrolabral preservation, surgical correction of FAIS, and capsular repair.*
  - Minimum 10-year follow-up complete.
- Exclusion criteria:
  - Tönnis grade > 1.
  - Hip dysplasia (lateral center-edge angle < 18°).
  - Prior ipsilateral hip arthroscopy.
  - Concomitant hip procedures (gluteus repair).
  - Developmental Hip Disorders (SCFE, LCP).

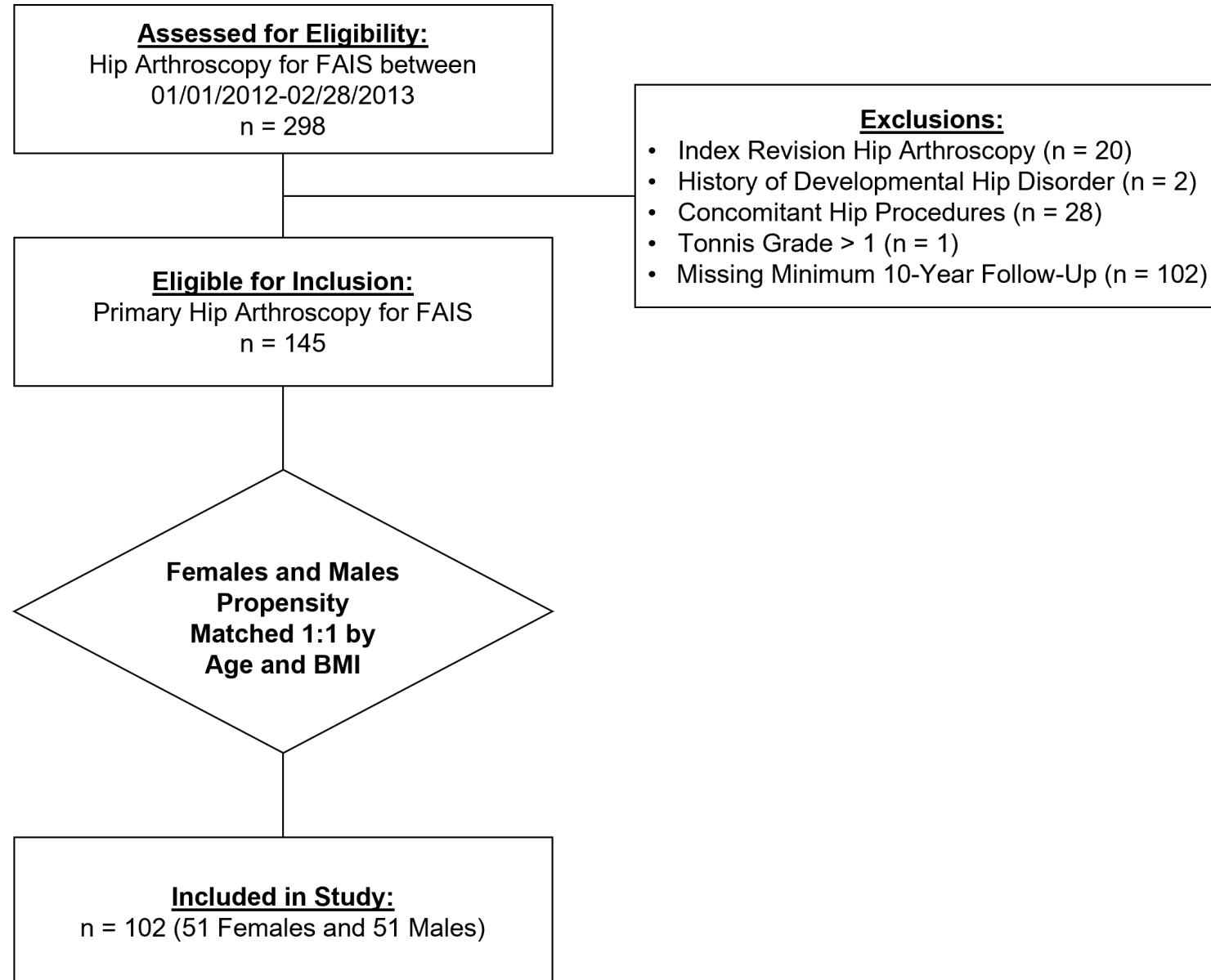
# Methods



## Statistical Analysis

- Patient-Reported Outcomes (PROs):
  - Compared between groups using independent samples t-tests.
- Clinically Significant Outcomes (CSO): Cohort-Specific
  - Minimal Clinically Important Difference (MCID): Distribution method.
  - Patient Acceptable Symptom State (PASS): Anchor-based method.
    - Compared between groups using Fisher's Exact tests.
- Kaplan-Meier Survival Analysis:
  - Log-Rank Test Comparisons.

# Results



# Results

**Table 1.** Demographic, Radiographic, and Intraoperative Characteristics.

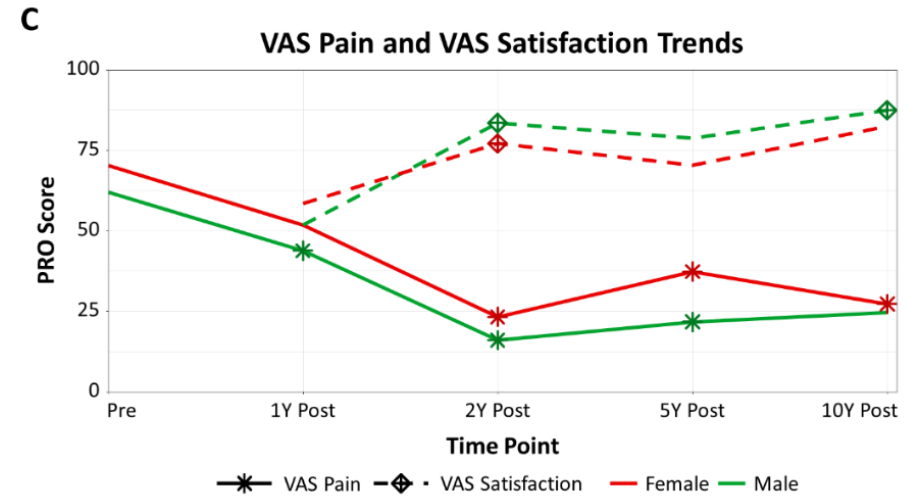
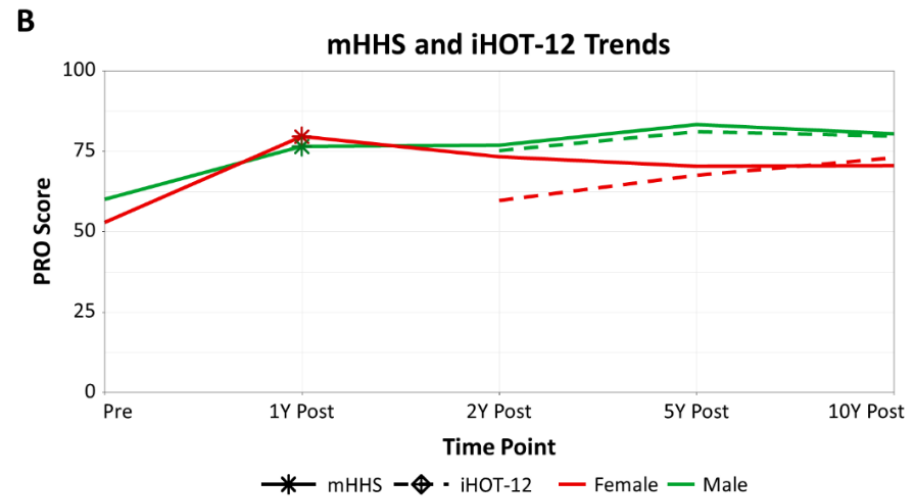
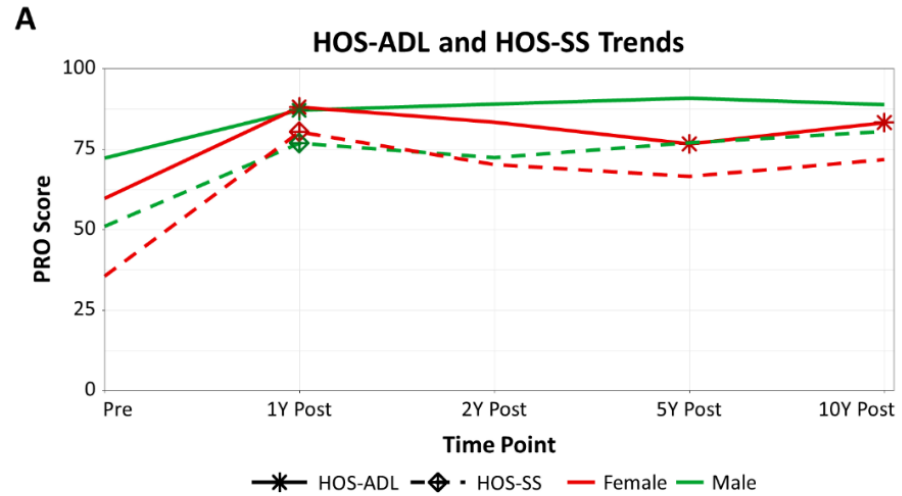
	<b>Female (N = 50)</b>	<b>Male (N = 50)</b>	<b>P-Value</b>
<b><i>Demographics</i></b>			
<b>Age (years)</b>	36.2 ± 12.3	35.7 ± 11.3	0.857
<b>BMI (kg/m<sup>2</sup>)</b>	24.9 ± 3.5	25.5 ± 3.3	0.362
<b>Physical Activity</b>	64.7%	78.4%	0.187
<b>Preoperative Pain &gt; 2 Years</b>	43.1%	37.3%	0.687
<b><i>Radiographics</i></b>			
<b>Alpha Angle (Pre)</b>	63.1 ± 11.6	65.7 ± 12.3	0.309
<b>Alpha Angle (Post)</b>	40.1 ± 4.2	40.7 ± 4.5	0.526
<b>Lateral Center-Edge Angle</b>	30.2 ± 7.2	30.5 ± 5.3	0.810
<b>Tönnis Angle (°)</b>	7.6 ± 4.8	6.6 ± 4.0	0.260
<b>Tönnis Grade</b>			1.000
<b>Grade 0</b>	78.4%	78.4%	
<b>Grade 1</b>	21.6%	21.6%	
<b><i>Procedures Performed</i></b>			
<b>Labral Repair</b>	82.4%	92.2%	0.234
<b>Capsular Plication</b>	98.0%	100.0%	1.000
<b>Femorplasty</b>	96.1%	94.1%	1.000
<b>Acetabular Rim Preparation</b>	78.4%	80.4%	1.000

\* indicates significance at a predetermined significance level of 0.05.

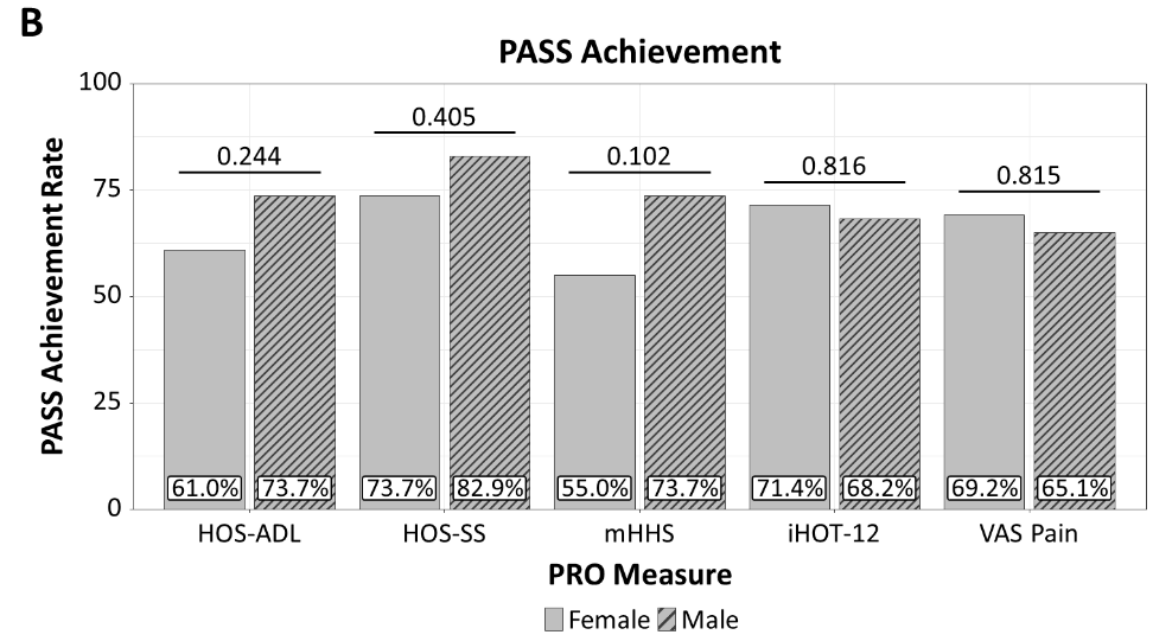
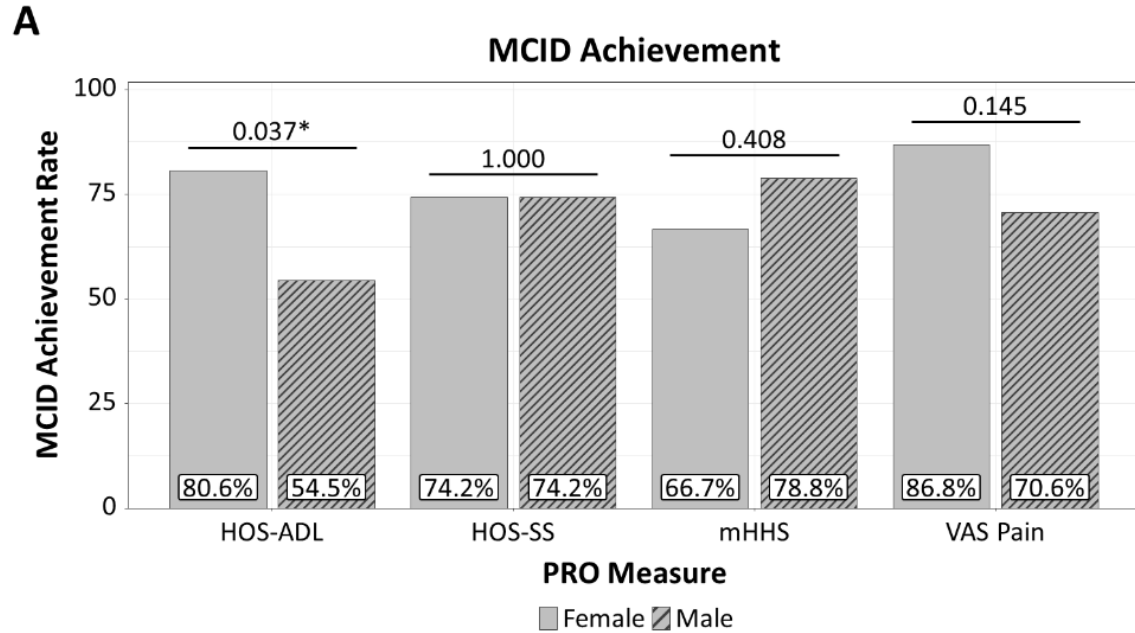




# Patient-Reported Outcomes



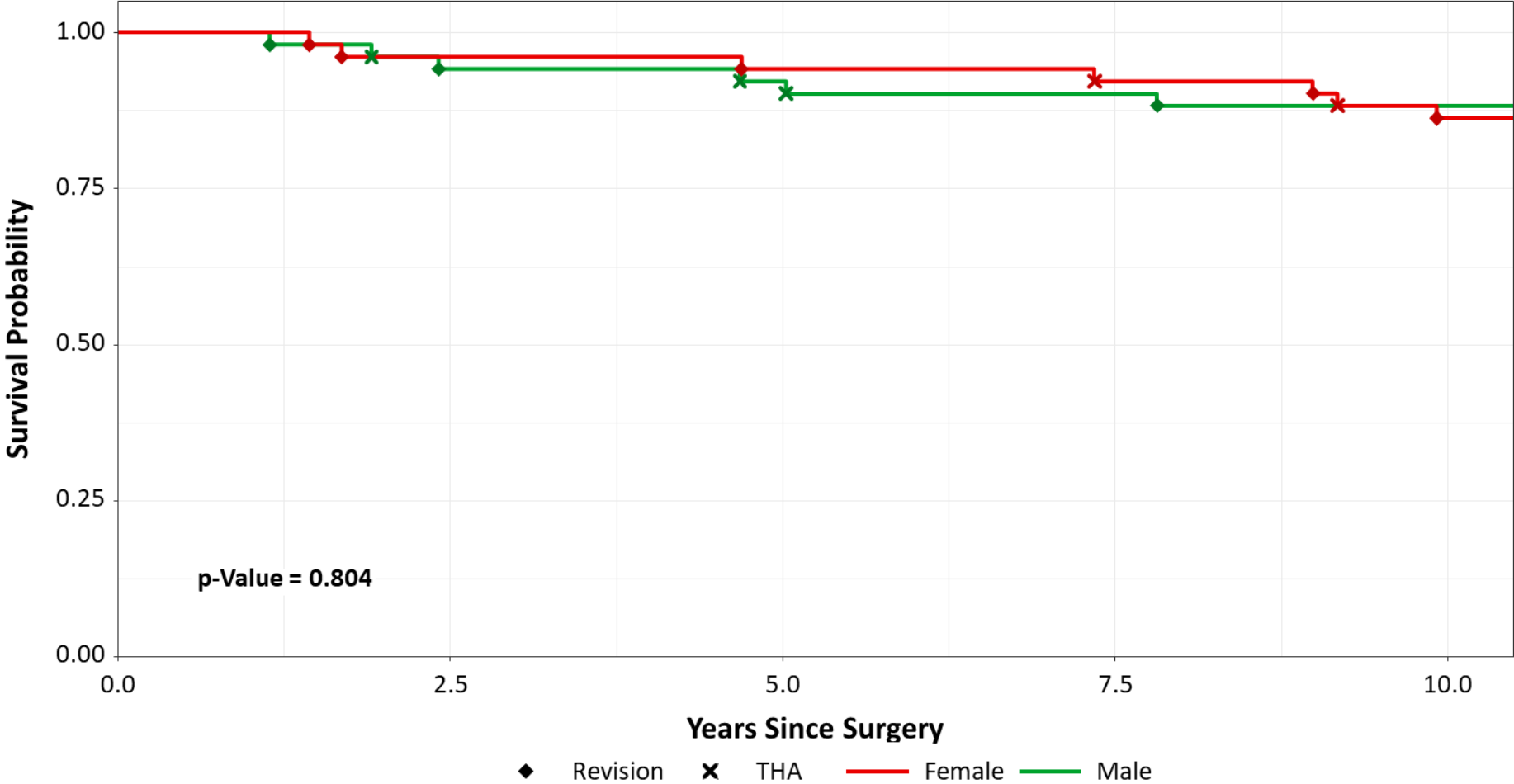
# Clinically Significant Outcomes



# Reoperation-Free Survivorship



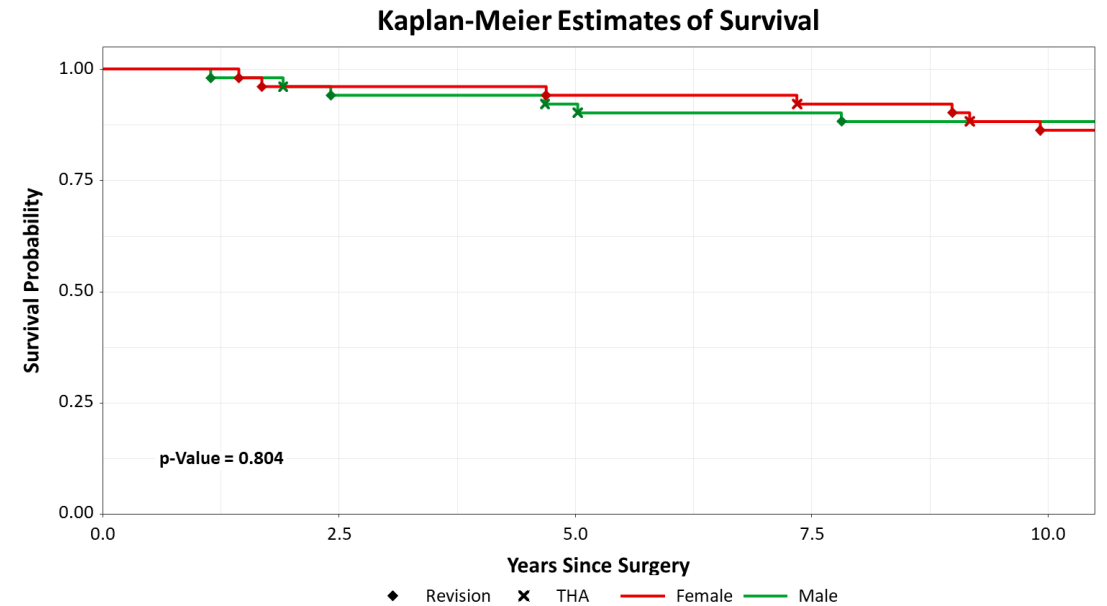
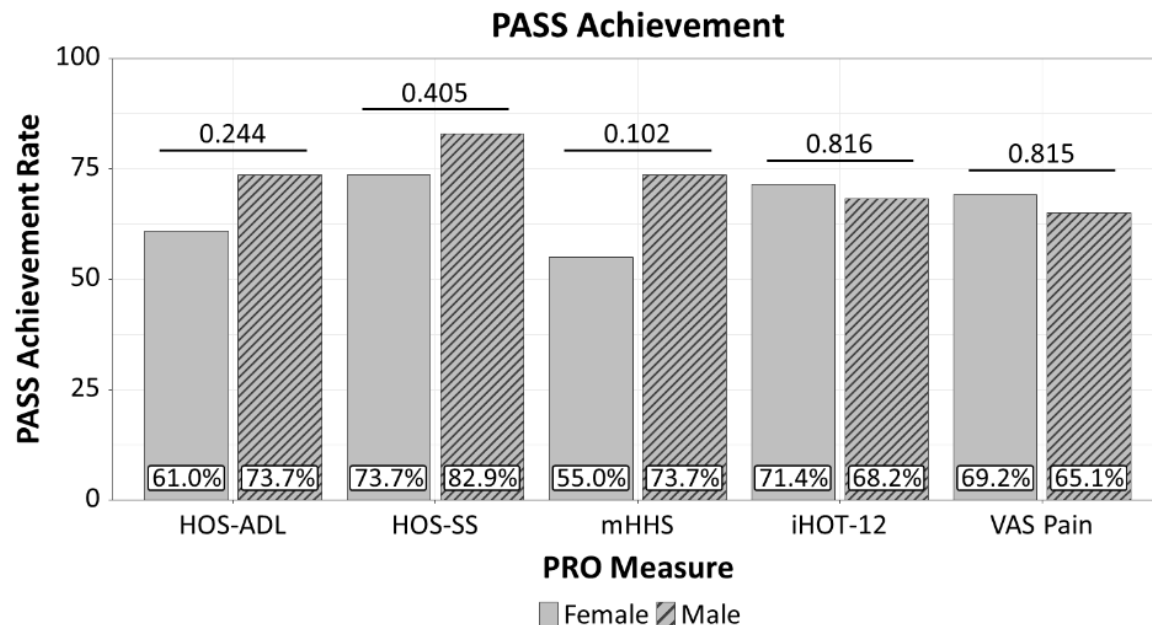
### Kaplan-Meier Estimates of Survival



# Conclusion



1. Male and female patients showed similar 10-year PROs after hip arthroscopy for FAIS.
2. Comparable MCID and PASS achievement was observed between groups for most PROs.
3. Comparable reoperation-free survivorship was observed.



# References



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- 3) Owen, M. M., Gohal, C., Angileri, H. S., Hartwell, M. J., Plantz, M. A., Tjong, V. K., & Terry, M. A. (2023). Sex-Based Differences in Prevalence, Outcomes, and Complications of Hip Arthroscopy for Femoroacetabular Impingement: A Systematic Review and Meta-analysis. *Orthopaedic journal of sports medicine*, 11(8), 23259671231188332. <https://doi.org/10.1177/23259671231188332>



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# Thank you.

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