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# **Hip Arthroscopy in the Setting of Concomitant Back Pain Shows Non-Inferior Five-Year Outcomes**

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**Joshua Wright-Chisem, MD; Omair Kazi, MS; Michael J. Vogel, BS;  
Shane J. Nho, MD, MS**

# Disclosures



**Joshua Wright-Chisem:** Nothing to Disclose.

**Omair Kazi:** Nothing to Disclose.

**Michael J Vogel:** Nothing to Disclose.

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

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# Introduction



Self-endorsed **lower back pain** has been demonstrated to have a **negative relationship** on **post-operative outcomes** across several specialties in orthopedics.<sup>1-4</sup>

In **hip arthroscopy**, concurrent **lower back pain** is associated with increased risk for **failure to achieve clinically significant outcomes** at **2-year follow-up**.<sup>5</sup>

**Limited studies** compare outcomes between patients with and without lower back pain at **minimum 5-year follow-up**.

# Objectives



- 1) To compare patient-reported outcomes (**PROs**) and achievement of clinically significant outcomes (**CSOs**) between patients with and without lower back pain at **5-years** after hip arthroscopy for FAIS.
- 2) To compare **reoperation-free survivorship** between groups.

# Hypotheses

- 1) Back pain and non-back pain patients would show **comparable** 5-year PROs and CSOs.
- 2) Both groups would demonstrate **comparable** reoperation-free survivorship.

# Methods



## Patient Selection

- Inclusion criteria:
  - Hip arthroscopy for FAIS between January 2012 and September 2018.
    - *All patients underwent contemporary hip arthroscopy with chondrolabral preservation, surgical correction of FAIS, and capsular repair.*
  - Minimum 5-year follow-up complete.
- Exclusion criteria:
  - Tönnis grade > 1.
  - Care under worker's compensation.
  - Prior ipsilateral hip arthroscopy.
  - Prior spine surgery.
  - Concomitant hip procedures (gluteus repair).
  - Developmental Hip Disorders (SCFE, LCP).

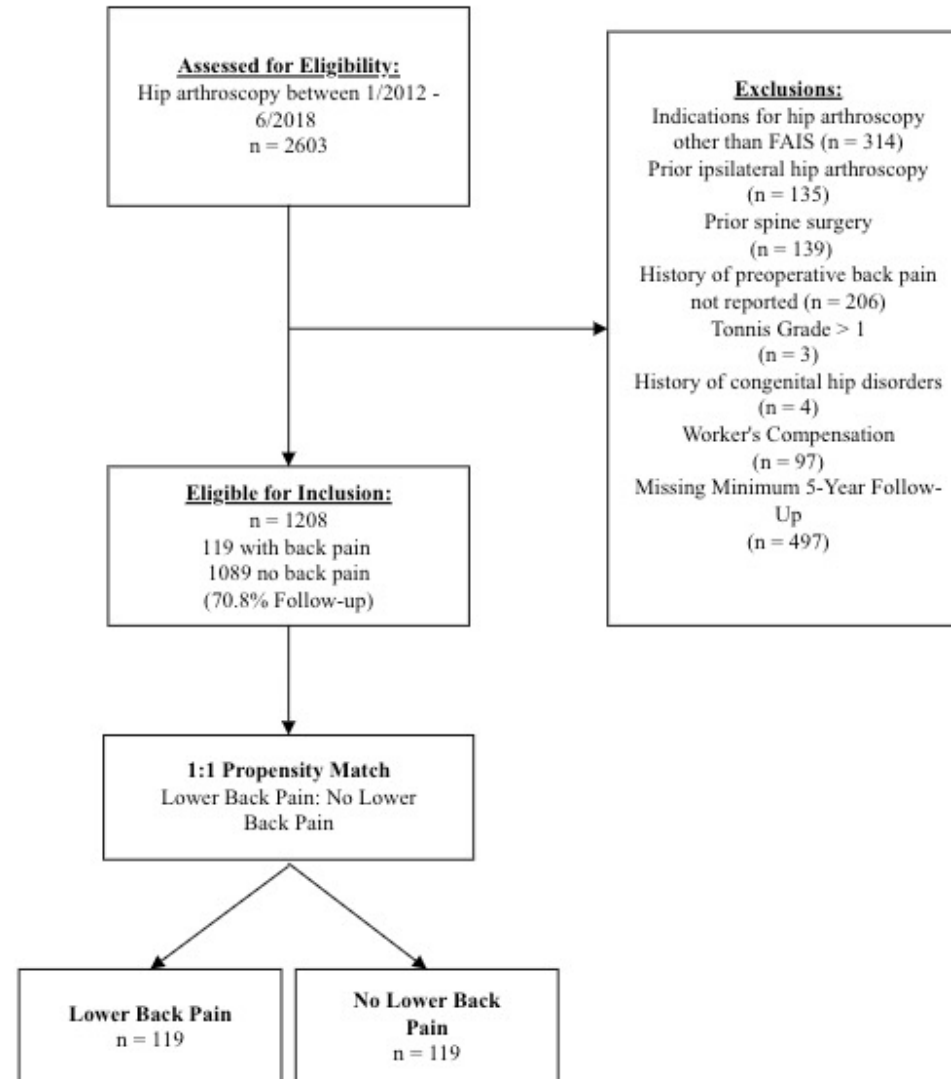
# Methods



## 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.

# Patient Selection

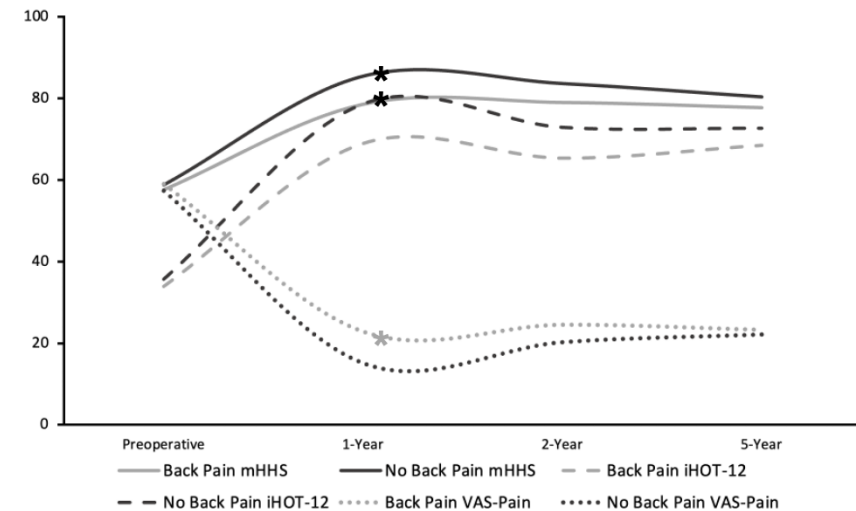
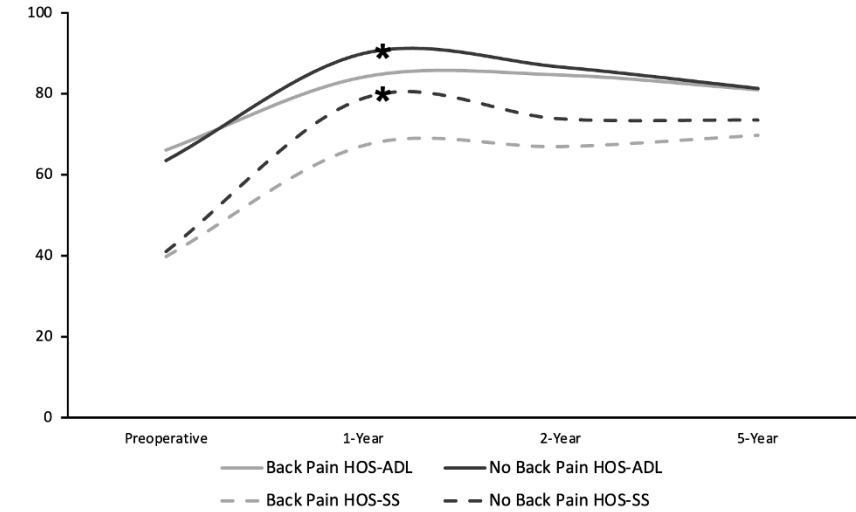


# Cohort Characteristics and Patient Reported Outcomes



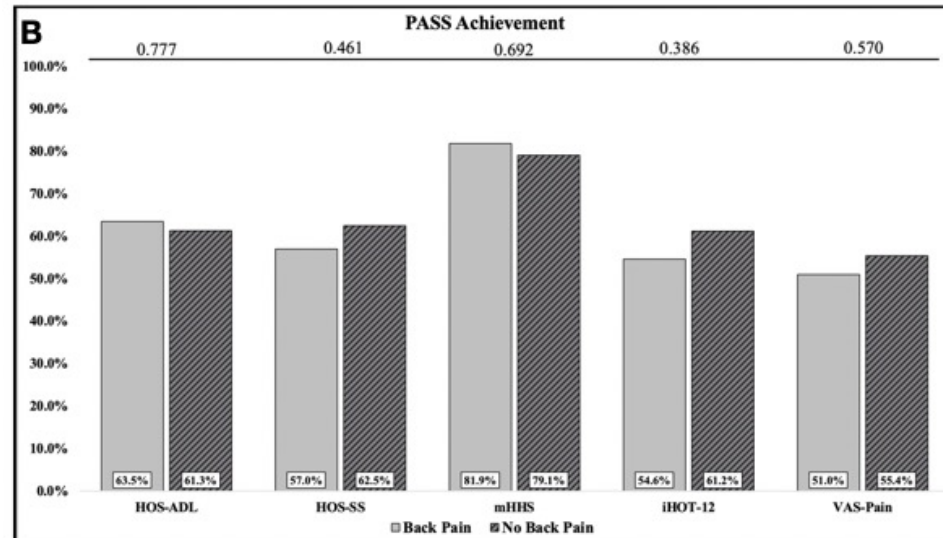
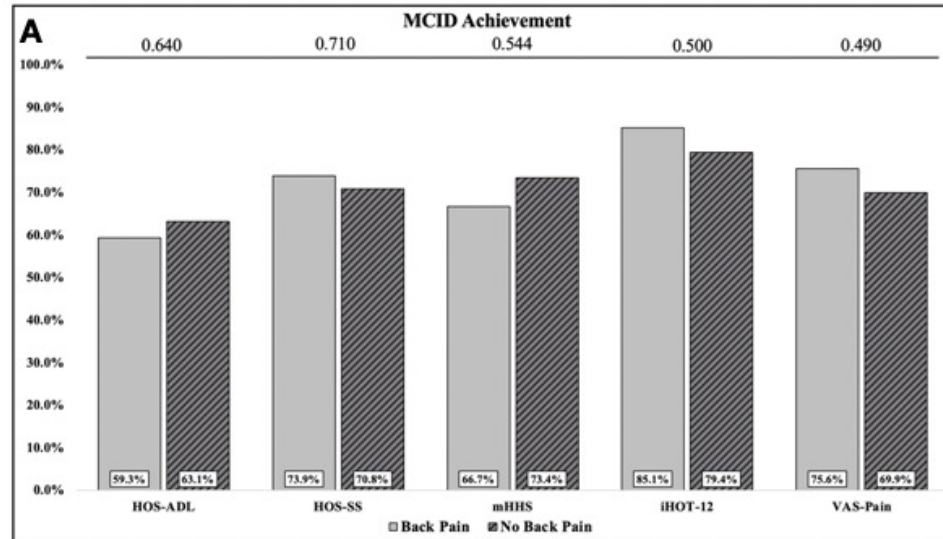
**Table 1.** Demographic, Radiographic, and Intraoperative Characteristics.

	Back Pain (N = 119)	No Back Pain (N = 119)	p-Value
<b>Demographics</b>			
Age (years)	37.8 ± 11.9	37.9 ± 12.6	1.000
BMI (kg/m <sup>2</sup> )	25.1 ± 4.9	25.4 ± 5.6	0.742
Follow-up (years)	6.0 ± 2.0	6.0 ± 1.8	1.000
<b>Radiographics</b>			
Alpha Angle (Pre)	57.8 ± 12.6	58.3 ± 11.4	0.767
Alpha Angle (Post)	37.8 ± 4.0	38.6 ± 4.5	0.082
Lateral Center-Edge Angle	30.0 ± 6.4	29.7 ± 6.6	0.745
Tönnis Grade			0.488
Grade 0	90.6%	93.4%	
Grade 1	9.4%	6.6%	
<b>Procedures Performed</b>			
Labral Repair	100.0%	100.0%	1.000
Capsular Plication	100.0%	100.0%	1.000
Femoroplasty	100.0%	100.0%	1.000

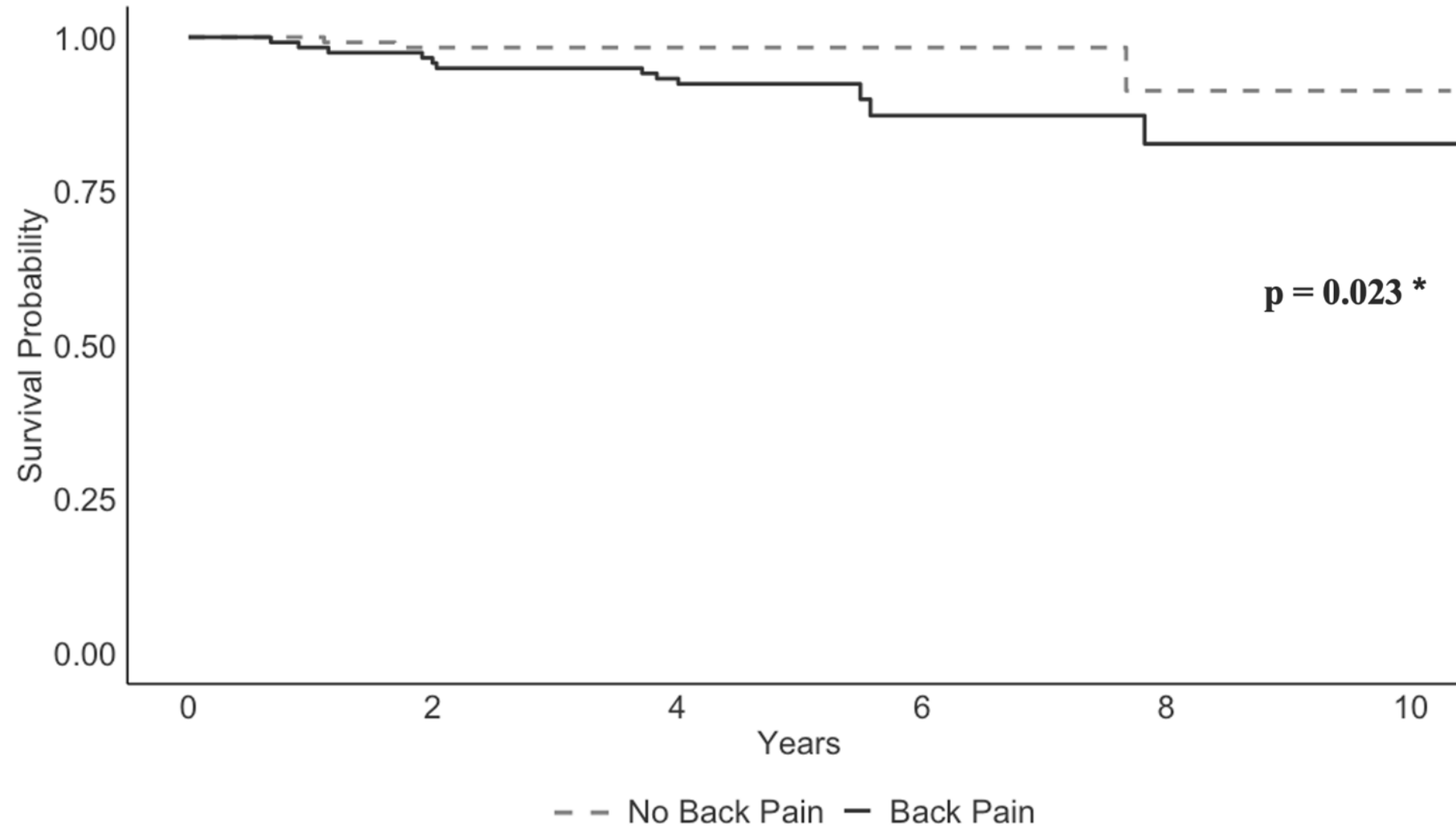




# Clinically Significant Outcomes

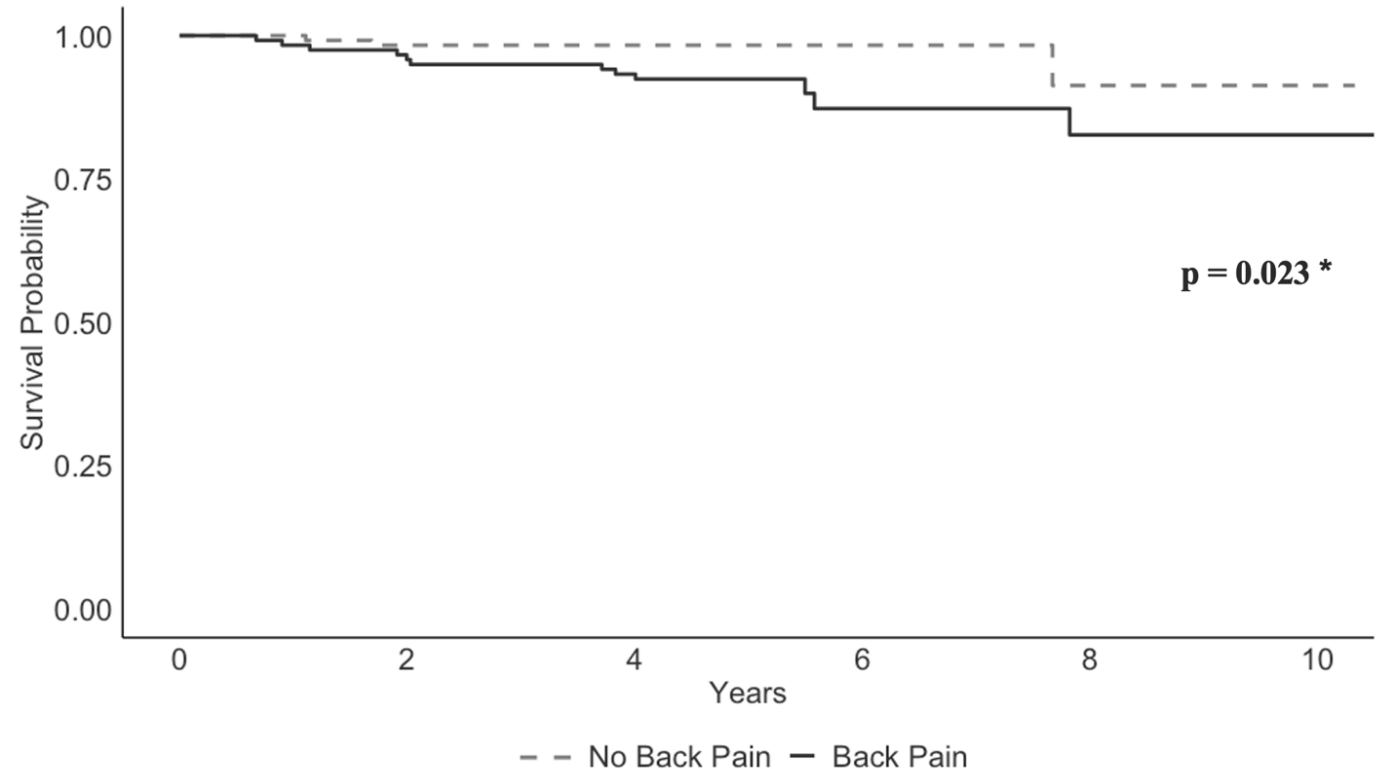


# Reoperation-Free Survivorship



# Conclusion

1. Patients with and without back pain showed similar 5-year PROs after hip arthroscopy for FAIS.
2. Comparable MCID and PASS achievement was observed between groups for all PROs.
3. Patients with back pain had inferior time-dependent reoperation-free survivorship



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