

# EVALUATION OF A NOVEL SINGLE-USE URETEROSCOPE:

## User Satisfaction & Comparison Survey

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### INTRODUCTION & OBJECTIVES

The first single-use ureteroscope was brought to market in 2011 with the goal of providing an alternative to traditional reusable ureteroscopes, combatting the growing issues seen throughout endoscopy specialties. This study sought to compare a new pre-market ureteroscope versus current reusable and single-use ureteroscope system in the U.S.

### MATERIALS & METHODS

- To thoroughly examine and understand the new single-use ureteroscope, a total of 14 board certified urologists were recruited to perform simulated antegrade and retrograde ureteroscopies with the pre-market (not yet FDA approved) aScope 5 Uretero (and aBox 2 monitor).
- Following completion of the simulated ureteroscopy, the urologists completed a 6-question survey across 6 variables seen in table 1. A 10-point scale was used to quantify and compare the performance from 1 (unacceptable) to 10 (excellent), versus the urologist’s current platform.

### RESULTS

- 28 simulated ureteroscopies were performed by 14 urologists. Full user ratings can be found below in Figures 1 & 2.
- **Figure 1 shows the high ratings across all categories of the pre-market aScope 5 Uretero given by board-certified urologists.**
- **The pre-market aScope 5 Uretero recieved higher ratings compared to the urologists current ureteroscope platforms in use (including single-use and reusable ureteroscopes).**
- Nearly all respondents currently utilize a hybrid model, with both single-use and reusable scopes in their inventory.

FIGURE 1. USER PREFERENCE SURVEY FULL RESULTS

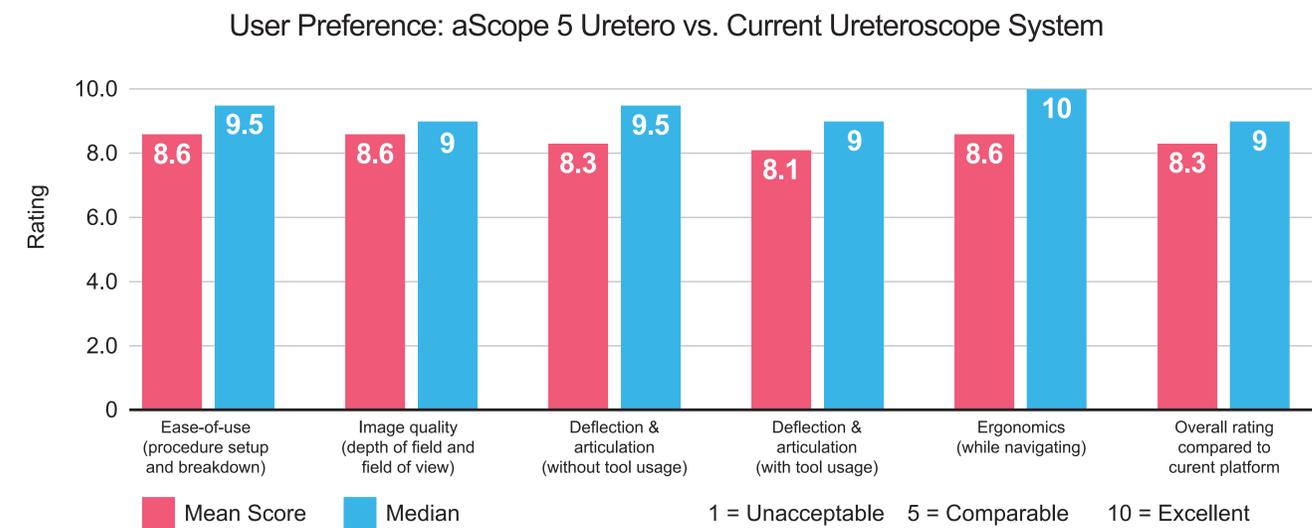
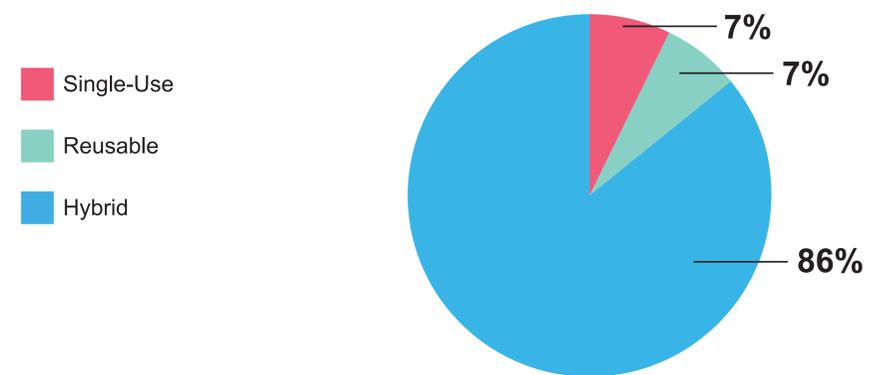


FIGURE 2. CURRENT FLEXIBLE URETEROSCOPE SYSTEM IN USE.

What type of ureteroscopy platform do you currently utilize?



### DISCUSSION

Single-use ureteroscopes were designed to reduce overall procedure costs and to eliminate the growing burden of scope repairs within this specialty. Published research has found that flexible ureteroscopy costs can amount to more than \$1,300 per procedure, with flexible ureteroscopes being damaged and requiring a repair every 15 procedures<sup>2</sup>. As the scope usage grows, the risk of degradation and worsened scope performance increases, which could impact the overall success of the procedure. Single-use ureteroscopes do not require repairs or reprocessing following a ureteroscopy, which removes the risk of scope damage or degradation over time between cases. Additionally, by removing the need for cleaning and repairs, the risk of procedural delays and disrupted workflow due to scope availability issues is also removed. With multiple single-use ureteroscopes on the market today, it is imperative that each facility evaluates the financial implications of single-use and the overall performance of each scope, to ensure they provide their physicians with the optimal ureteroscopy platform.

### CONCLUSION

The pre-market single-use aScope 5 Uretero received high ratings compared to current reusable and single-use ureteroscope platforms utilized by surveyed urologists and may provide a new safe and effective tool for better treating patients.

### REFERENCES

1. Taguchi K, Usawachintachit M, Tzou DT, et al. Micro-Costing Analysis Demonstrates Comparable Costs for LithoVue Compared to Reusable Flexible Fiberoptic Ureteroscopes. J Endourol. 2018;32(4):267-273. doi:10.1089/end.2017.0523
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