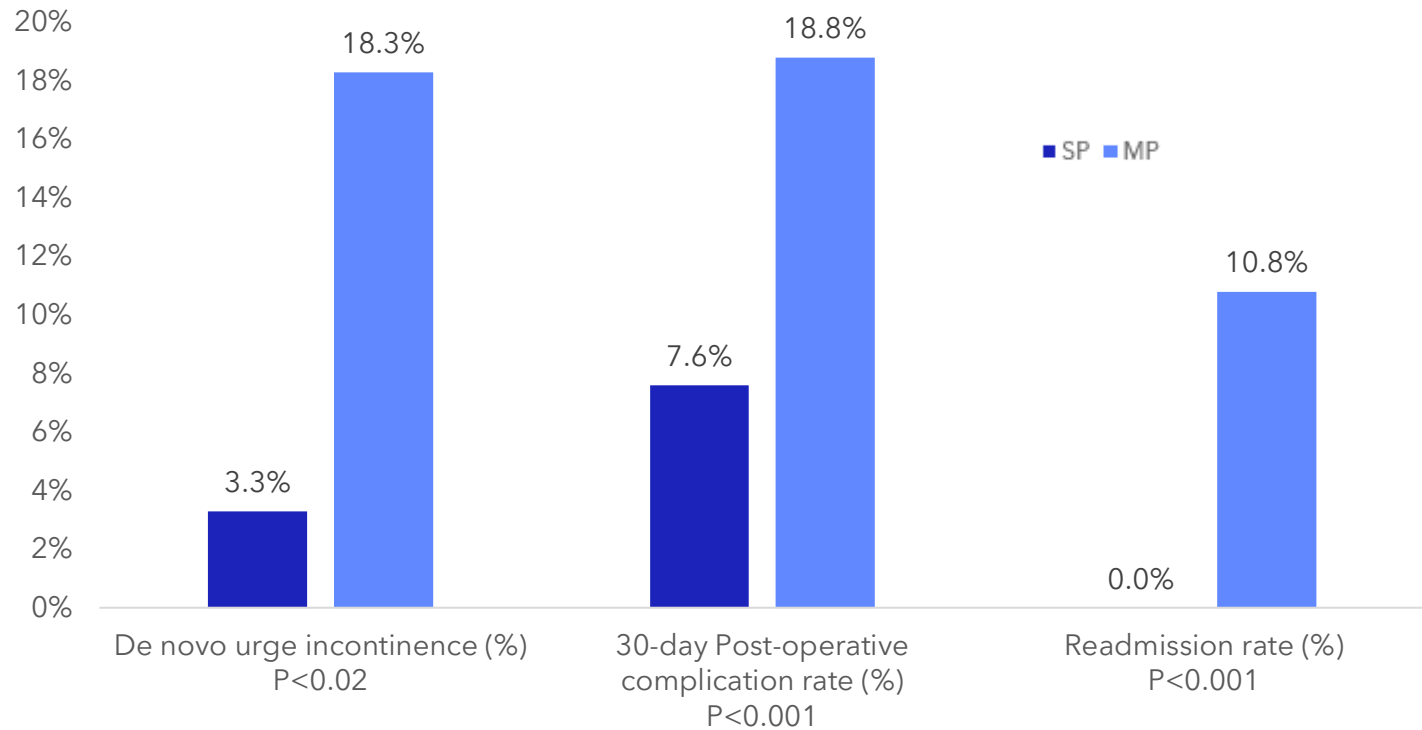


# Single Port Versus Multiport Robot assisted Simple Prostatectomy: A Multi-institutional Study From the Single-port Advanced Research Consortium (SPARC)

Simple prostatectomy with **da Vinci single port (SP) approach** results in a **reduced rate of post-operative complications/readmissions** and **improved functional outcomes** relative to a multiport (MP) approach.



Note: P-value of <0.05 was considered statistically significant

\* Data on file at Intuitive.

Mahmoud Abou Zeinab, et al, Single Port vs Multiport Robot-Assisted Simple Prostatectomy: A Multi-Institutional Study from the SPARC, Urology, (2023) doi:<https://doi.org/10.1016/j.urology.2023.03.022>

## Purpose

To compare robot-assisted simple prostatectomy intraoperative and postoperative outcomes between single-port (SP) and multiport (MP) robotic systems in a multi-institutional setting.

## Study design

Data were prospectively collected and retrospectively analyzed from 5 institutions from the Single-Port Advanced Research Consortium (SPARC). Patients underwent robotic-assisted simple prostatectomy (RASP) using the da Vinci Xi (Multi-port (MP), n=249) or da Vinci SP (Single-port, (n=156; n=110 transvesical & n=46 transperitoneal approach)) between Jan 2017 and October 2022. Only prostate sizes greater than 80 cc and requiring surgical intervention were included. All surgeries were completed by 6 different surgeons with at least 5 years of experience in robotic surgery.

## Outcomes measured

**Perioperative variables** included operative time, estimated blood loss, drain placement, continuous bladder irrigation (CBI) use, complication rate as defined by Clavien-Dindo classification, hospital length of stay, inpatient morphine milligram equivalent (MME), pain score assessed using a numeric analog scale, and Foley catheter duration.

**Postoperative variables** included complication rate as defined by Clavien-Dindo classification, readmission rate to any health facility within 30 days after the surgery, last follow-up, PVR, IPSS, urinary quality of life, maximum flow rate, PSA, and de novo urge incontinence defined as using more than 1 pad for safety per day.

## Key results

- **CBI** was used in 64.4% of MP cases and 17.3% of SP cases (P<0.001)
- SP median **length of stay** of 17.7 vs 33 hours in the MP patient cohort (P < 0.001)
- SP required less **MME** (0 mg SP vs. 8.4 mg MP, P <0.001) and fewer prescribed opioids at discharge (12% SP vs 42% MP, P < 0.001).
- Median **Foley catheter duration**: 6 and 9 days for the SP and MP groups, respectively (P <0 .001).
- There was no significant difference between the groups in the operative time, last IPSS (International Prostate Symptom Score), urinary quality of life score, maximum flow rate, or PSA.
- **Study limited** by the retrospective design and inherent selection bias, relatively small sample size, and the short median follow-up. Investigators were unable to analyze and collect all functional outcomes. All cases were done by expert SP robotic surgeons, which may limit the reproducibility of the results.

## Disclosures

---

For intended use and/or indications for use, risks, cautions, and warnings and full prescribing information, refer to the associated user manual(s) or visit <https://manuals.intuitivesurgical.com/market>.

Intuitive's Privacy Notice is available at [www.intuitive.com/privacy](http://www.intuitive.com/privacy).

© 2024 Intuitive Surgical Operations, Inc. All rights reserved. Product and brand names /logos are trademarks or registered trademarks of Intuitive Surgical or their respective owner.