

# Improving prostatectomy outcomes with da Vinci SP

Early evidence for alternative access approaches



## Robotic urology surgery: leading with innovation

Urologic surgeons have always strived to be at the forefront of innovation to provide the best possible care. Over two decades ago, they were the pioneers who adopted robotic surgery by using da Vinci® multiport systems and advanced instruments to perform procedures including prostatectomy, radical and partial nephrectomy, cystectomy, and pyeloplasty.

The pioneering spirit of urologic surgeons helped advance minimally invasive surgery around the world. Their early dedication is now evidenced by more than 34,000 peer-reviewed publications. These publications indicate a relentless pursuit of improvement and surgeons' desire to adopt innovations that help enable better overall surgical care.

## Positive outcomes for prostatectomy with da Vinci SP

Now urologic surgeons continue to innovate by developing alternative access approaches using the da Vinci SP®, a versatile and high-performance single-port robotic surgical system.

As with multiport robotics, the early adoption of da Vinci SP by urologic surgeons is starting to show clinical value in prostatectomy. By combining single-site entry with a strategically placed access point, surgeons are reporting improved patient outcomes including a shorter length of hospital stay, shorter catheterization time, less postoperative pain, and a reduced complication rate—all without compromising on functional outcomes.

See the next page for highlights from four recently published studies.

“Intuitive’s da Vinci SP system enables me to bring innovation of new approaches and techniques to the robotic surgery arena. It is bringing us ‘back to the future’ with extraperitoneal and retroperitoneal access.”

Dr. Simone Crivellaro  
Program director  
UIC Urology Robotic Program

1. Birkmeyer J, Finks J, O'Reilly A et al. Surgical Skill and Complication Rates after Bariatric Surgery. *New England Journal of Medicine*. 2014;370(3):285-285. doi:10.1056/nejmc1313890

## Radical prostatectomy

A meta-analysis showed that single-port robotic-assisted radical prostatectomy (SP-RARP) was associated with a shorter hospital stay, shorter catheterization time, and less postoperative pain medications as compared to multiport-RARP, with similar perioperative and functional outcomes. Li K, Yu X, Yang X, et al. *J Endourol.* 2022;36(1):83-98. doi:10.1089/end.2021.0210

A multi-institutional, propensity-score matched study comparing single-port extraperitoneal and transperitoneal RARP showed that the extraperitoneal approach was associated with shorter length of stay and a higher rate of same-day discharge. Abou Zeinab M, Beksac AT, Ferguson E, et al. *Urology.* 2023;171:140-145. doi:10.1016/j.urology.2022.10.001

## Simple prostatectomy

This first-ever multicenter prospective study assessed the perioperative and postoperative outcomes of single-port robotic-assisted simple prostatectomy using a transvesical approach. All sites completed the procedures successfully with minimal intraoperative or postoperative complications. Same-day discharge and minimal pain were feasible. Patients also experienced a short hospital stay and minimal pain. Abou Zeinab M, Beksac AT, Corse T, et al. *J Urol.* 2022;208(2):369-378. doi:10.1097/JU.0000000000002692

A multi-institutional study showed that simple prostatectomy performed with the da Vinci SP system resulted in a minimal rate of complications and improved functional outcomes compared to a multiport approach. Abou Zeinab M, Ramos R, Ferguson EL, et al. [published online ahead of print, 2023 Mar 29]. *Urology.* 2023;S0090-4295(23)00279-0. doi:10.1016/j.urology.2023.03.022

Watch an extraperitoneal prostatectomy with the da Vinci SP system, performed by Dr. Jihad Kaouk.



### Financial disclosure

Drs. Crivellaro and Kaouk have received compensation from Intuitive for consulting and/or educational services.

### Surgical risks

Radical prostatectomy: surrounding nerve damage that can lead to urinary incontinence and/or erectile dysfunction, rectal or bowel injury, urethral stricture, lymphocele, lymphedema; bowel obstruction.

### Important safety information

Serious complications may occur in any surgery, including surgery with a da Vinci system, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection, and internal scarring that can cause long-lasting dysfunction/pain.

Risks specific to minimally invasive surgery, including surgery with a da Vinci system, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; a longer operative time, the need to convert to an open approach, or the need for additional or larger incision sites. Converting the procedure could result in a longer operative time, a longer time under anesthesia,

and could lead to increased complications. Contraindications applicable to the use of conventional endoscopic instruments also apply to the use of all da Vinci instruments.

For important safety information, including surgical risks and considerations, please also refer to [intuitive.com/safety](https://intuitive.com/safety). For a product's intended use and/or indications for use, risks, full cautions, and warnings, please refer to the associated user manual(s).

Individual outcomes may depend on a number of factors—including but not limited to—patient characteristics, disease characteristics, and/or surgeon experience.

### Da Vinci SP system

The safety and effectiveness of this device for use in the performance of general laparoscopic surgery procedures have not been established. This device is only intended to be used for single port urological procedures and for transoral otolaryngology surgical procedures in the oropharynx for benign tumors and malignant tumors classified as T1 and T2 with the da Vinci EndoWrist® SP instruments and the da Vinci SP surgical system (SP1098).

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