

## PE04 Comparing the approach to radical prostatectomy using the da Vinci Xi and da Vinci single port: A propensity score analysis

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**Introduction & Objectives:** The da Vinci Single Port (SP) is an innovative platform created to improve the minimally invasive surgery concept. With this console, one or two (SP plus one) incisions are needed to perform the same procedure that usually needs six incisions when performed with the current multiport robot. However, its benefit over the standard multiport robot is still unclear. Our article aims to compare the intra- and postoperative outcomes between the da Vinci Xi and SP robots in patients who underwent radical prostatectomy in a referral center.

**Materials & Methods:** The prospectively collected data of 71 patients who underwent radical prostatectomy with the SP from June 2019 to April 2020 were compared with 1386 patients who underwent prostatectomy with da Vinci Xi robot from December 2018 to April 2020 in a single center. After a propensity score match, two groups of 71 patients were selected for our study.

**Results:** The mean follow-up was 4.3(±2.8) and 5.7(±3.8) months for the SP and Xi, respectively. The mean total operative time and mean console time were both higher in the Single Port console (115 vs. 99 min and 80 vs. 66 min, respectively;  $p < 0.001$ ). However, the mean blood loss was lower in the SP group. No intra- or postoperative complications were reported in either group. The pain scores in 6, 12, and 18 hours were similar between both approaches. The positive surgical margins (PSM) rate was 17% in the SP and 15.4% in the Xi group. None of the patients had BCR during the follow-up. The potency rates were 18.3% and 29.5% for the SP and Xi, respectively ( $p = 0.1$ ). The continence rates were 84% and 69% for the SP and Xi, respectively ( $p = 0.1$ ).

**Conclusions:** Our study described that, when compared to the Xi robot, the SP approach to radical prostatectomy is associated with an increased operative time with less blood loss. Both groups had similar complications rates, pain scores, and positive margins. The functional and oncological outcomes were not statistically different in the follow-up period. Longer term follow-up will provide further evidence on the impact of SP implementation on functional and oncological outcomes.