

MP 19-07 Longitudinal analysis of trifecta outcome in robot-assisted laparoscopic radical prostatectomy

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Introduction

- ✓ Since the widespread use of PSA screening, patients are more commonly diagnosed with low grade and low stage prostate cancer (PC)
- ✓ Once PC control is achieved, the patient will focus on continence and potency.
- ✓ The traditional concept of trifecta consists of **continence, potency, and cancer control**.
- ✓ The trifecta is most emphasized as **the true endpoint** in patient with localized PC.
- ✓ In the previous studies, trifecta rate is reported to 20-91% and the follow-up period is various with 12-54 months.
- ✓ It can be a major problem to evaluate postoperative outcome, because cancer recurrence and functional recovery vary with time.
- ✓ There is **no study to analyze longitudinally trifecta rate** in robot-assisted laparoscopic radical prostatectomy (RARP)

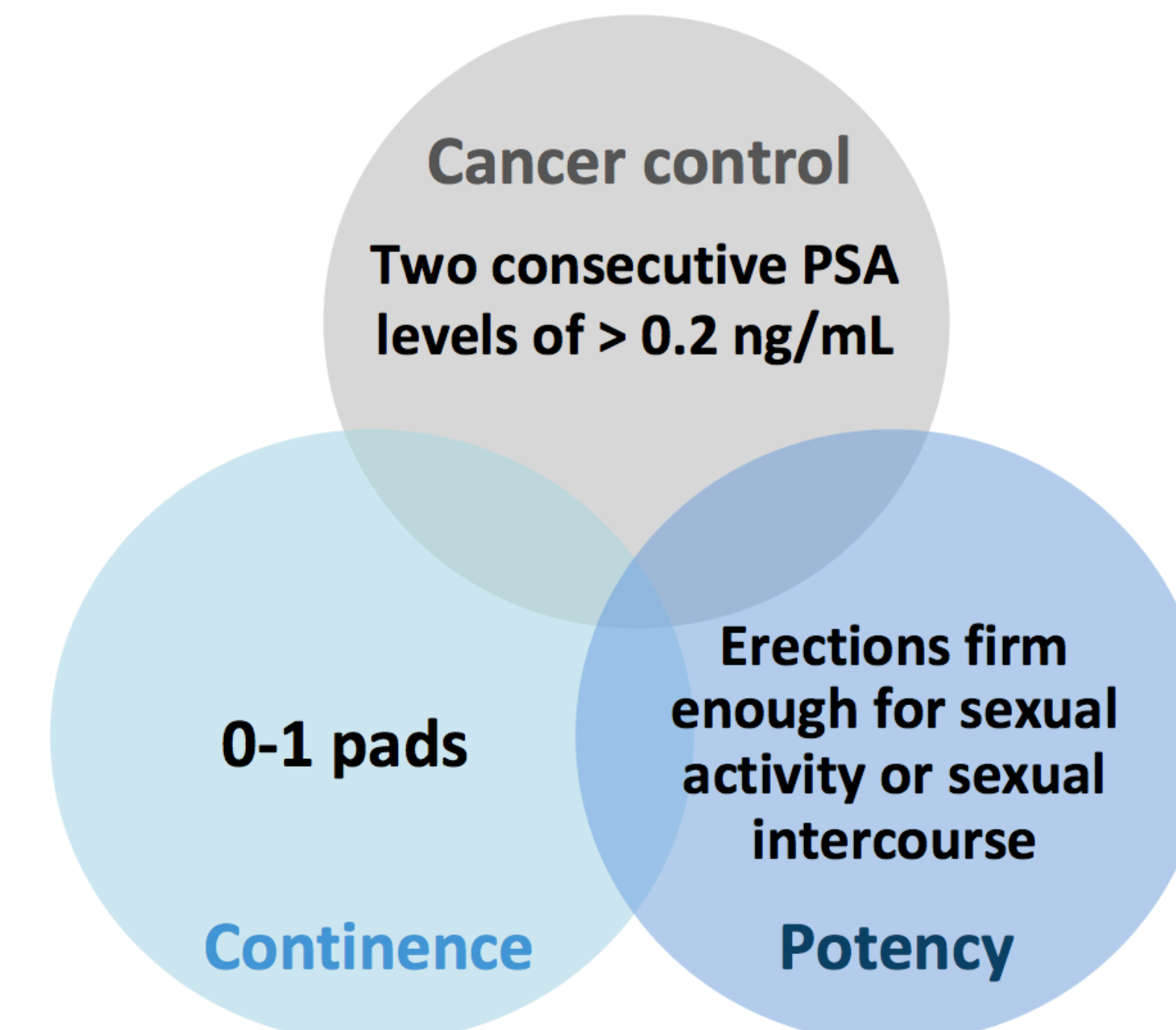
Objectives

- To analyse **the trifecta outcome** (continence, potency, and cancer control) **longitudinally** in RARP

Patients

| Characteristics | Overall | Nerve sparing (+) | Nerve sparing (-) | P-value |
|---|---------|-------------------|-------------------|---------|
| No. of patients | 291 | 100 | 191 | |
| Age, yr, mean | 66.2 | 64.5 | 67.1 | 0.0013 |
| Body mass index, kg/m ² , mean | 23.4 | 23.4 | 23.4 | 0.9516 |
| Serum PSA at diagnosis, ng/ml | 8.67 | 6.77 | 9.67 | 0.0005 |
| Prostate volume, mL, mean | 30.2 | 30.9 | 29.8 | 0.5548 |
| Pathological T stage, n (%) | | | | |
| pT2 | 230(79) | 92(92) | 138(72) | 0.0002 |
| pT3a | 47(16) | 6 (6) | 41(21) | |
| pT3b | 14 (5) | 2 (2) | 12 (6) | |
| Pathological grade group, n (%) | | | | |
| 1 | 18 (6) | 12(12) | 6 (3) | 0.0001 |
| 2-3 | 197(69) | 79(79) | 118(63) | |
| 4-5 | 72(25) | 9 (9) | 63(34) | |
| Risk class, n (%) | | | | |
| Low | 46(16) | 26(26) | 20(10) | 0.0001 |
| Intermediate | 151(52) | 68(68) | 83(43) | |
| High | 94(32) | 6 (6) | 88(46) | |
| Operative time, min, mean | 206.5 | 205.8 | 206.9 | 0.8654 |
| Estimated blood loss, mL, mean | 190.8 | 244.3 | 162.8 | 0.0008 |

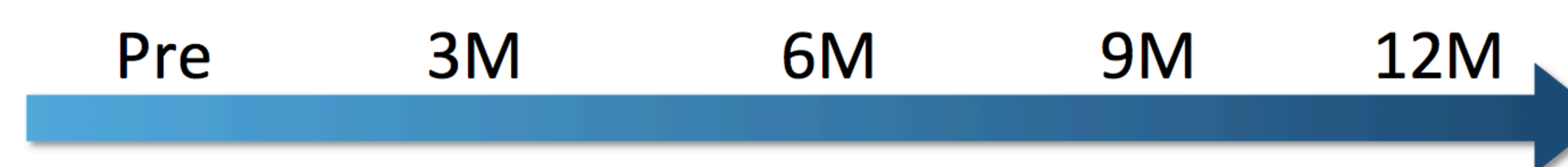
Trifecta definition



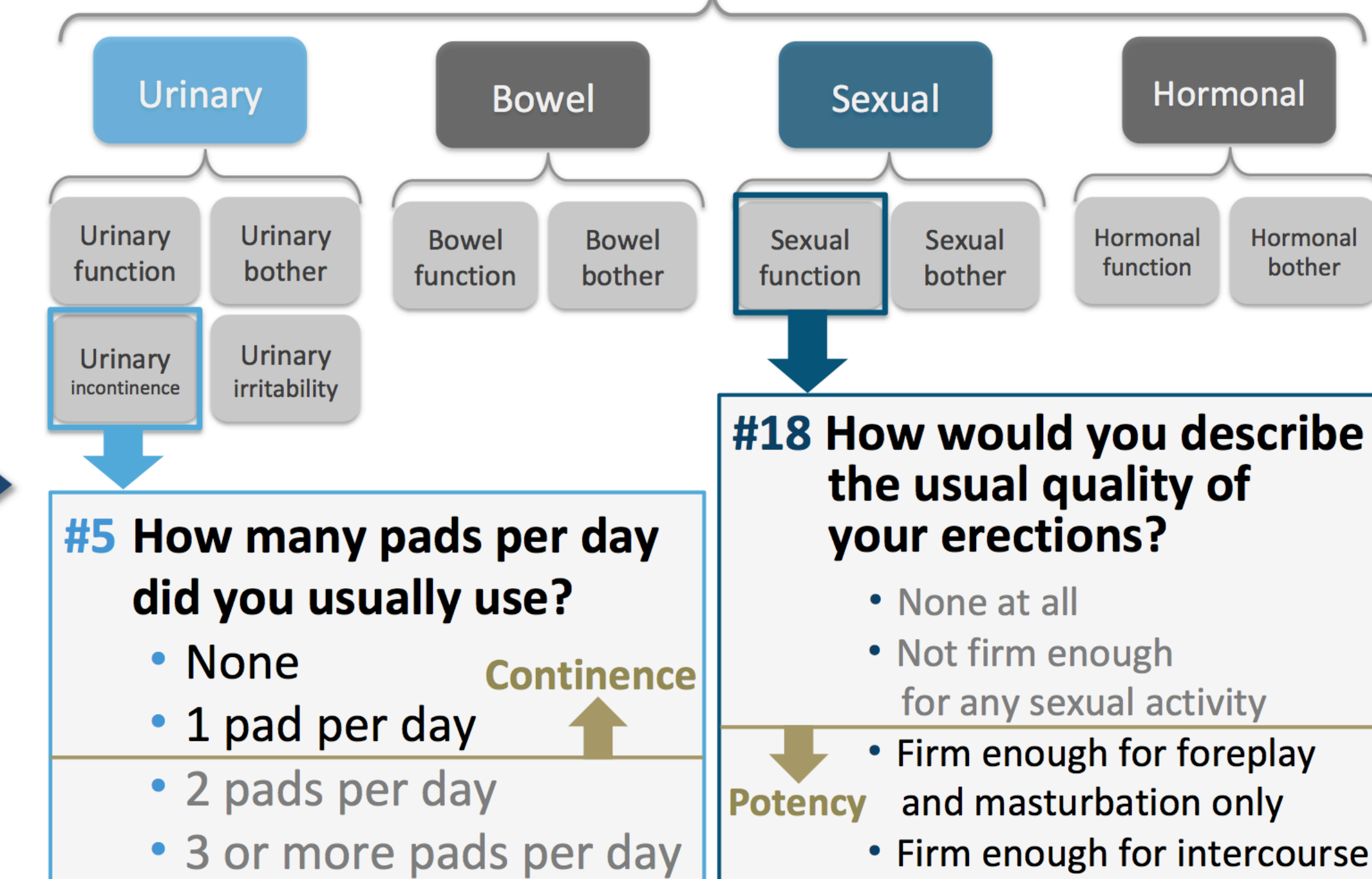
Methods

Longitudinal study

- We prospectively obtained **one-year longitudinal EPIC data** (preoperative and at 3, 6, 9, and 12 months after RARP) from 458 patients who underwent RARP performed by a single surgeon.
- We **exclude** 167 patients with **incontinence** or **erectile dysfunction** patients at preoperative.

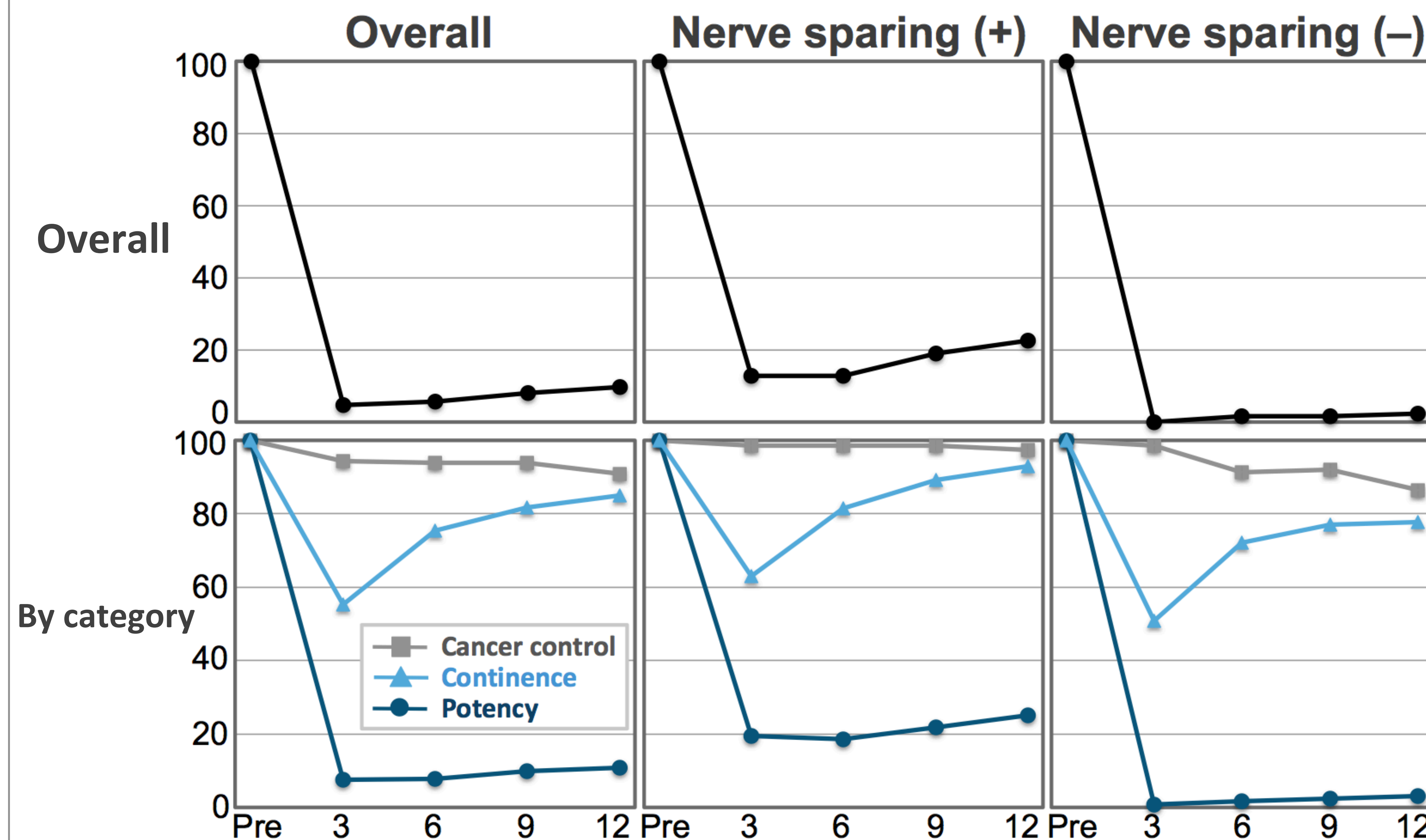


EPIC (Expanded Prostate Cancer Index Composite)



Results

Trifecta outcome according to nerve-sparing procedure



Conclusions

- ✓ Trifecta outcomes more accurately reflect patient expectations following RARP.
- ✓ In our longitudinal analysis, **potency rate** was found to be associated with **the achievement of trifecta**.

Conflict of Interest Disclosure
Name: Shogo Inoue

I have no potential conflicts of interest to report.

