Supplementary Table 1. Logistic regression models at 3, 6, and 9 months for the outcome of erectile and urinary function at 1 year.

	Erectile Function			Urinary Function		
Predictor	3 Month	6 Month	9 Month	3 Month	6 Month	9 Month
	P value	P value	P value	P value	P value	P value
Functional Score	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Age	0.2	0.009	0.9	0.2	0.6	0.5
Baseline Surgeon Score				0.3	0.5	0.9
Moderate	0.7	0.9	0.4	-	-	-
Good	0.010	0.002	0.5	-	-	-
Pathological Stage						
T2B	0.9	0.4	0.056	0.3	0.2	0.3
≥T3	0.9	0.3	0.12	0.6	0.3	0.6
Pathological Grade						
7	0.3	0.3	0.034	0.3	0.2	0.7
≥ 8	0.8	0.8	0.5	0.3	0.4	0.6
Nerve Sparing Status	0.6	0.3	0.4	-	-	-
PSA	0.019	0.3	0.4	0.7	0.5	0.8
Surgical Approach						
Laparoscopic	0.019	0.4	0.4	0.038	0.9	0.5
Robotic	0.5	0.9	0.4	0.6	0.048	0.006

Supplementary Table 2. AUCs for erectile and urinary function models at one and two years.

	Main Analysis				Excluding patients functional at the time of prediction				Using number of Pads	
	12 Month		24 month		12 month		24 month		12 month	24 month
Prediction at	Erectile	Urinary	Erectile	Urinary	Erectile	Urinary	Erectile	Urinary	Pad Free	Pad Free
3	0.846	0.856	0.796	0.789	0.753	0.759	0.721	0.718	0.845	0.787
6	0.885	0.880	0.831	0.862	0.766	0.781	0.754	0.744	0.885	0.805
9	0.918	0.912	0.882	0.869	0.820	0.810	0.797	0.718	0.905	0.892
12	-	-	0.885	0.876	-	-	0.768	0.715	-	0.896

The author of the editorial comment suggests that our study does not account for several variables that may affect functional recovery after radical prostatectomy including aspects of surgical technique, baseline pelvic floor strength, and race. We disagree that these would influence the findings or diminish the general applicability of our models. For example, we do not find it plausible that fine details of surgical technique, such as “preservation versus wide resection of bladder neck”, would affect findings when a very gross surgical predictor, nerve sparing, was non-significant. The author also claims “pelvic floor strength and/or race of patients may also affect potential for recovery”. But again, we find it implausible that these sorts of subtle predictors would increase the extremely high AUCs we report, when variables such as age and baseline functional score were non-significant. We would also question the author’s reference to “confounding”, as this is related to determining whether an exposure has a causal relationship with an outcome. Our study is not concerned with causal attribution but with prediction. In conclusion, while we agree that the characteristics presented by the author could theoretically be associated with functional recovery, we do not believe they would substantively impact our results or the ability to generalize the findings.

Men with complications after radical prostatectomy frequently ask their doctors when symptoms of erectile dysfunction and urinary incontinence will improve. The authors investigated this important question in a dataset of 2162 post prostatectomy patients and presented a predictive relationship between severity of self-reported symptoms in the months following radical prostatectomy and functional outcomes two years after surgery. The authors suggest that findings from this study could be used for patient counseling and as a tool to justify early intervention in symptomatic post prostatectomy patients. The authors should be commended for their contribution to the prostate cancer survivorship literature, but it is important to consider variables in the study which may impact ability generalize the findings.

First, outcomes in this study may reflect specific surgical techniques used at MSKCC. Over the last 20 years, numerous surgical techniques have been described for radical prostatectomy. A recent survey from the European Association of Urology Robotic Section demonstrated that heterogeneity is still prevalent among experts regarding surgical approach to the prostate (antegrade versus retrograde), preservation versus wide resection of bladder neck, seminal vesicle dissection, and release of neurovascular bundles[1]. Because of the potential for technique to confound generalization of prostatectomy data, the Pasadena Consensus Panel on Robot-Assisted Radical Prostatectom[2] has recommended that scientific publications regarding RALP include a description of Initial, Demolitive, and Reconstructive surgical steps. Since the authors have not described the surgical technique used during open, laparoscopic, and robotic prostatectomy procedures in the study, it is possible that projections from their cohort may not be accurate if different surgical techniques are used.

Pelvic floor strength and/or race of patients may also affect potential for recovery after radical prostatectomy. MRI evaluations of post prostectomy patients have suggested that variances of the puborectalis[3] and the levator ani muscles[4] could affect return of continence after surgery. Similarly, it is unknown if race of a cohort could affect recovery projections. DeLancey et al has observed differences in urethral closure pressures between black and white women[5], so it is reasonable to suggest that pelvic floor differences may also exist among men. In the current study, the authors did not include baseline measurements of pelvic floor strength or race in their logistic regression. Without knowing more about such potentially different confounding variables, caution must be used in generalizing recovery projections

In conclusion, the authors present an excellent analysis of their current cohort. However, as the authors mention in the comments, the data needs to be externally validated. Once validation is performed in diverse patient cohorts, it could then be better generalized into routine patient counseling and used as tool for early interventions.

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