

A National Survey of Radiation Oncologists and Urologists on Proton Beam Radiotherapy and Robotic Surgery for Localized Prostate Cancer

MP27-14

Luke Bidikov MD, Paul Maroni MD, Thomas J. Pugh MD, Janet Kukreja
MD MPH, Sameer K. Nath MD, Rodrigo Pessoa MD PhD, Simon P. Kim
MD MPH

In 2011, we surveyed radiation oncologists and urologists on the perceived risks and benefits of new technologies

- robot-assisted radical prostatectomy (RARP) vs. open radical prostatectomy (ORP)
- proton-beam therapy (PBT) vs intensity-modulated radiation therapy (IMRT)

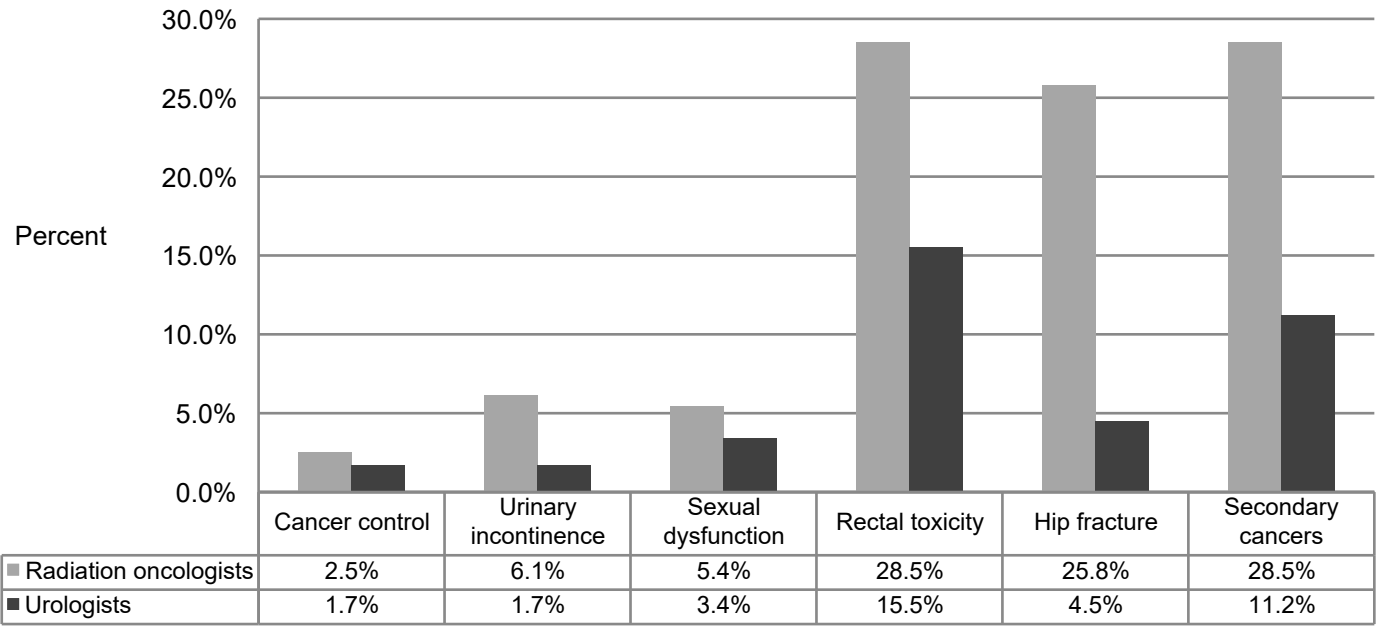


Figure 1 : Physician responses on perceptions that **proton radiation therapy (PRT)** is better than intensity-modulated radiation therapy (IMRT) for cancer control, quality of life and complications by specialty

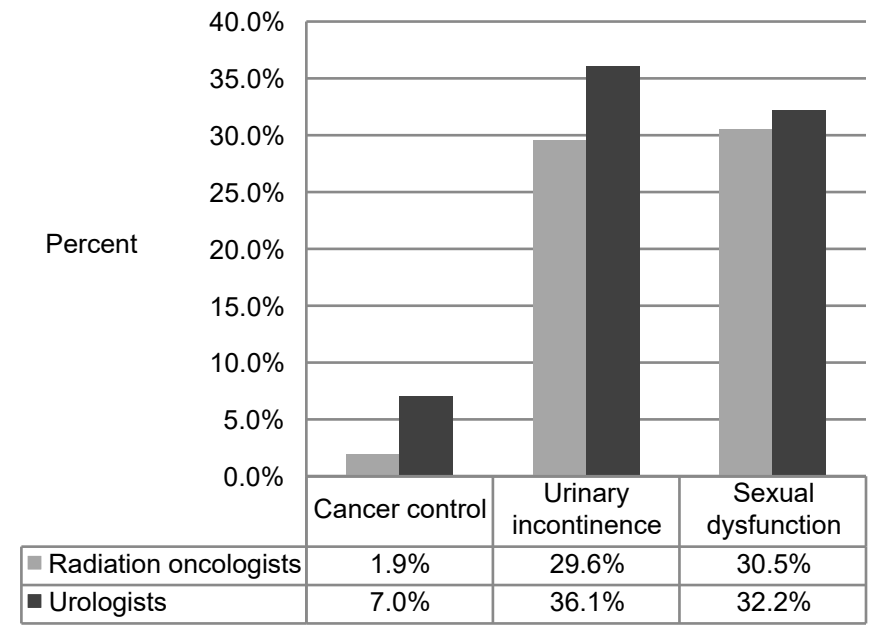


Figure 2: Physician responses on perceptions that **robotic-assisted radical prostatectomy (RARP)** is better than open radical prostatectomy (ORP) for cancer control and quality of life by specialty

Feature (Reference)	OR (95% CI)	p-value
Cancer control		
Access to proton beam	11.16 (1.46-85.23)	<0.001
Radiation oncologists (Urologists)	11.32 (1.59-80.83)	<0.001
Urinary incontinence		
Access to proton beam	6.24 (1.59-24.46)	<0.001
Radiation oncologists (Urologists)	1.93 (0.47-7.82)	0.36
Sexual dysfunction		
Access to proton beam	2.63 (0.77-8.93)	0.12
Radiation oncologists (Urologists)	2.99 (0.91-9.83)	0.07
Rectal toxicity		
Access to proton beam	3.77 (2.03-6.98)	<0.001
Radiation oncologists (Urologists)	2.49 (1.32-4.69)	<0.001
Hip fracture		
Access to proton beam	1.48 (0.59-3.42)	0.42
Radiation oncologists (Urologists)	9.43 (4.04-22.00)	<0.001
Secondary cancers		
Access to proton beam	1.86 (0.94-3.72)	0.08
Radiation oncologists (Urologists)	4.65 (2.38-9.07)	<0.001

Table 1: Adjusted odds ratios in responses that **proton beam radiation** therapy is superior to intensity-modulated radiation therapy for cancer control, quality of life and complication outcomes¹

Feature (Reference)	OR (95% CI)	p-value
Cancer control		
Access to robotic surgery	2.41 (0.86-6.74)	0.09
Urologists (Radiation oncologists)	2.40 (0.76-7.54)	0.13
Urinary incontinence		
Access to robotic surgery	2.71 (1.63-4.49)	<0.001
Urologists (Radiation oncologists)	0.83 (0.50-1.38)	0.49
Sexual dysfunction		
Access to robotic surgery	3.21 (1.88-5.47)	<0.001
Urologists (Radiation oncologists)	0.54 (0.31-0.91)	0.02

Table 2: Adjusted odds ratios in responses that **robotic-assisted radical prostatectomy** is superior than open radical prostatectomy for cancer control and quality of life outcomes¹