

# A Survey of Androgen Deprivation Patterns of Practice in Prostate Cancer by Radiation Oncologists in the United States

Jared Sturgeon, MD, PhD<sup>1</sup>; Nicolas Zouain, MD<sup>2, 3, 4</sup>.

1. Departments of Radiation Oncology at the University of Texas Medical Branch, Galveston, TX; 2. Department of Radiation Oncology, Roger Maris Cancer Center, Sanford Hospital, Fargo, ND; 3. University of North Dakota, School of Medicine, Grand Forks, ND; 4. Premiere Radiation Oncology, Naples, FL

## Objective

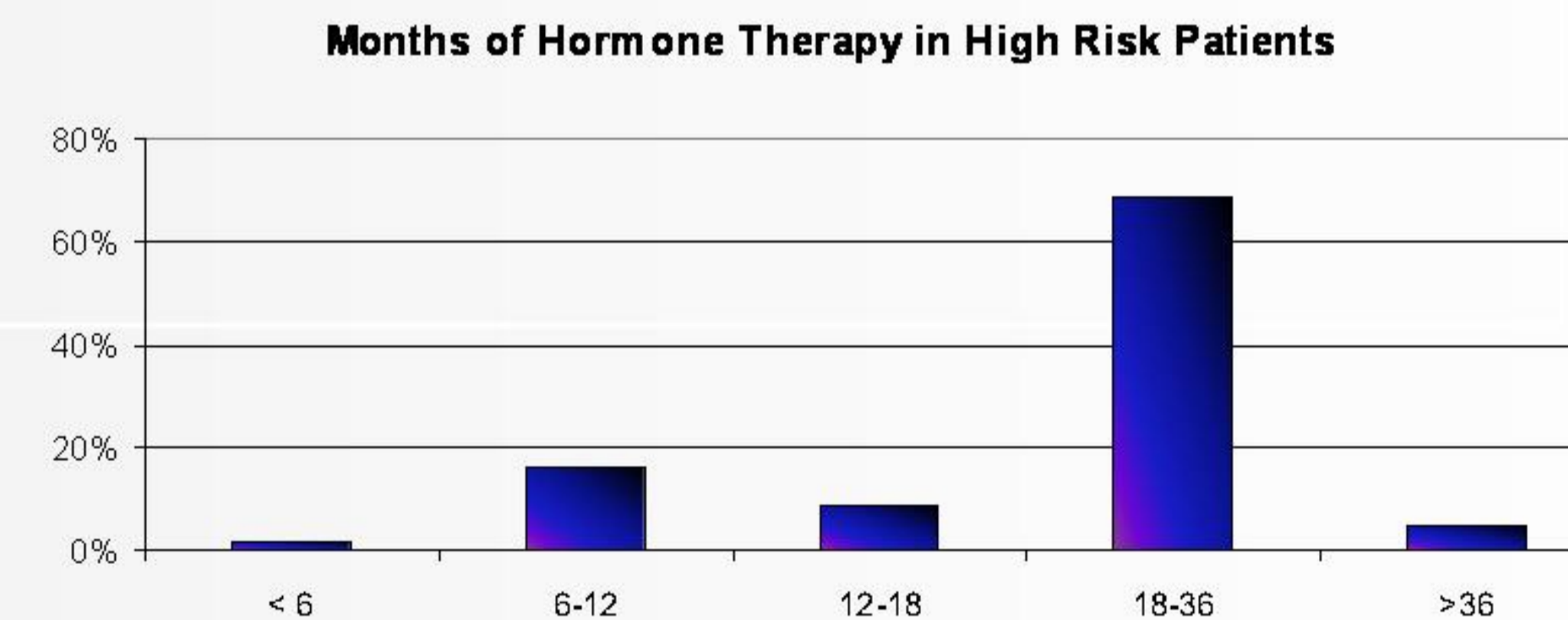
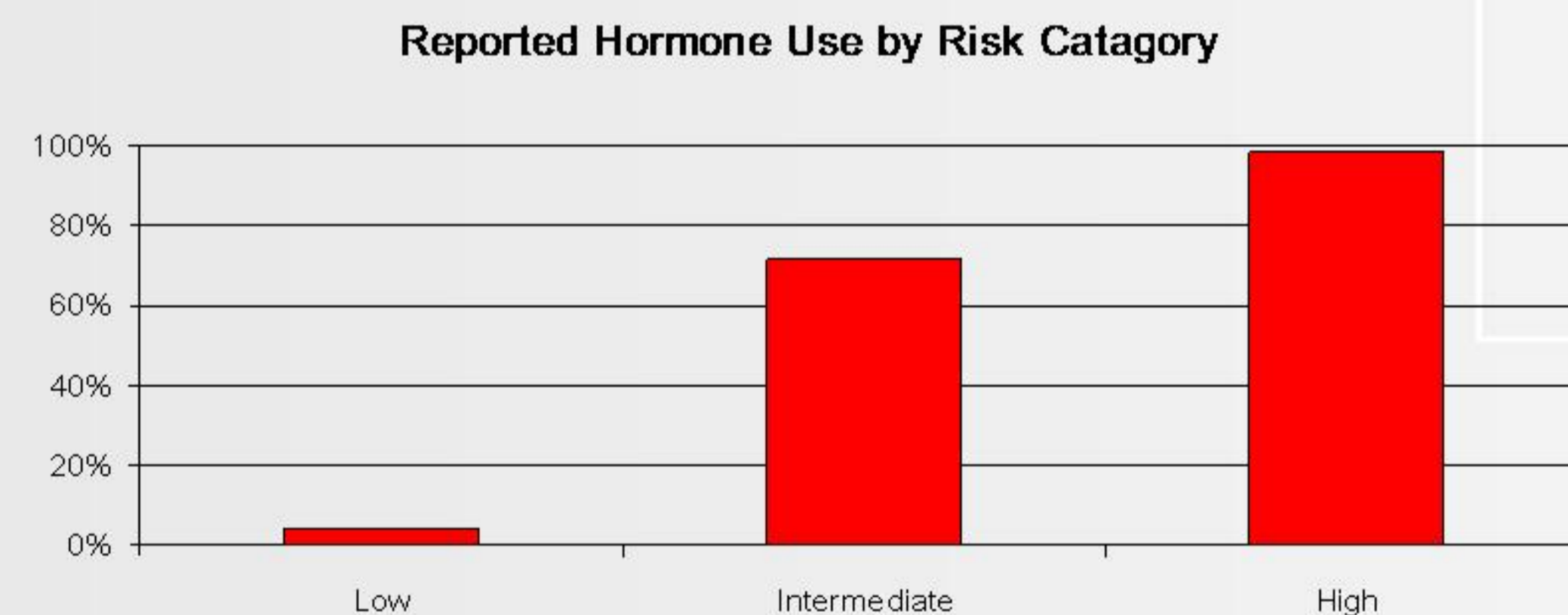
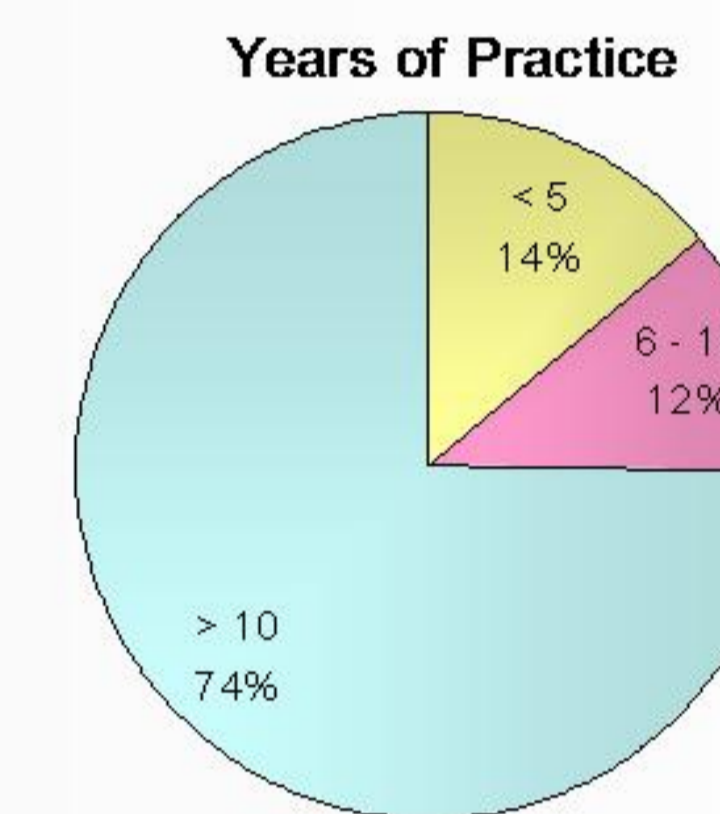
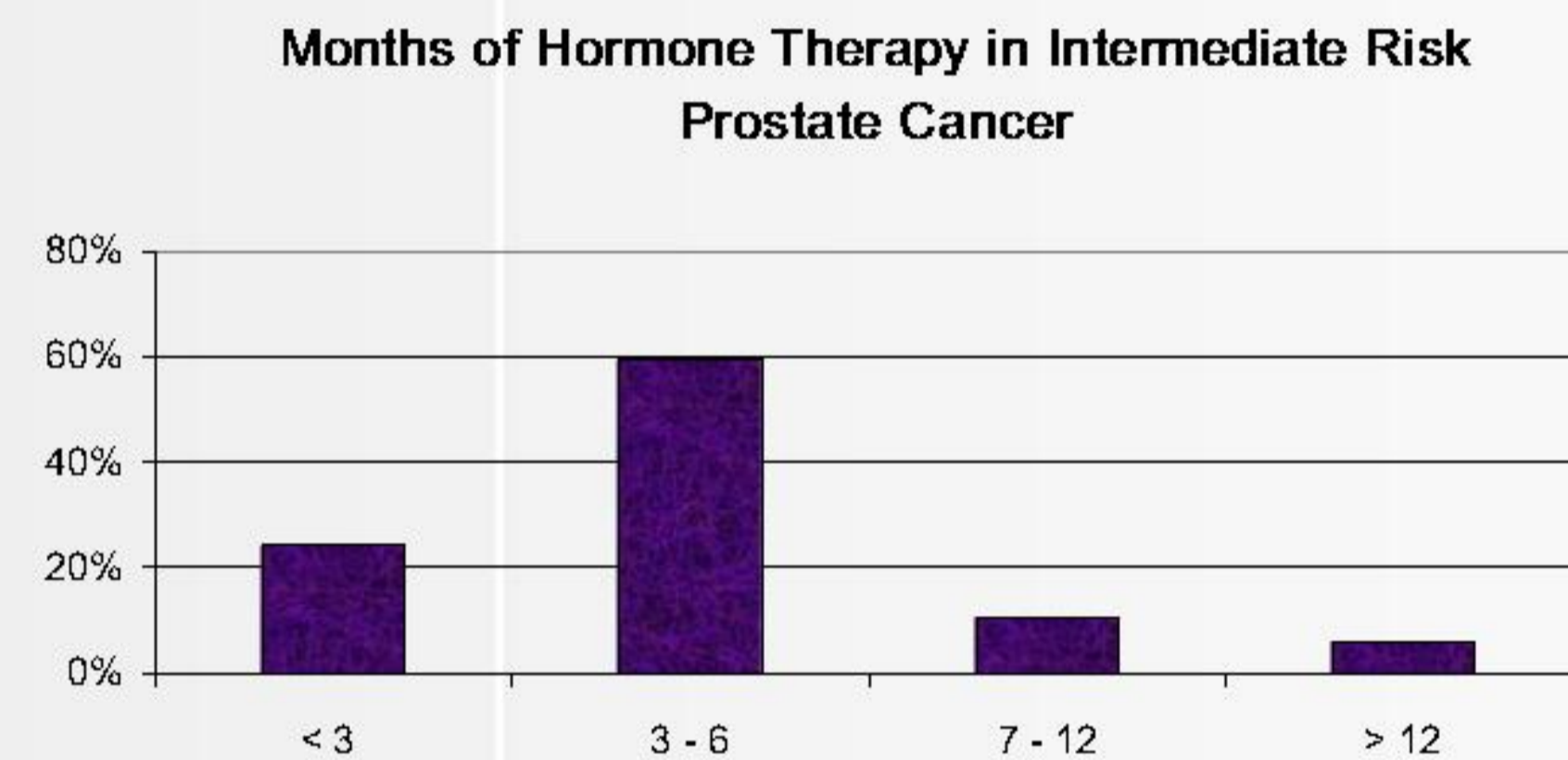
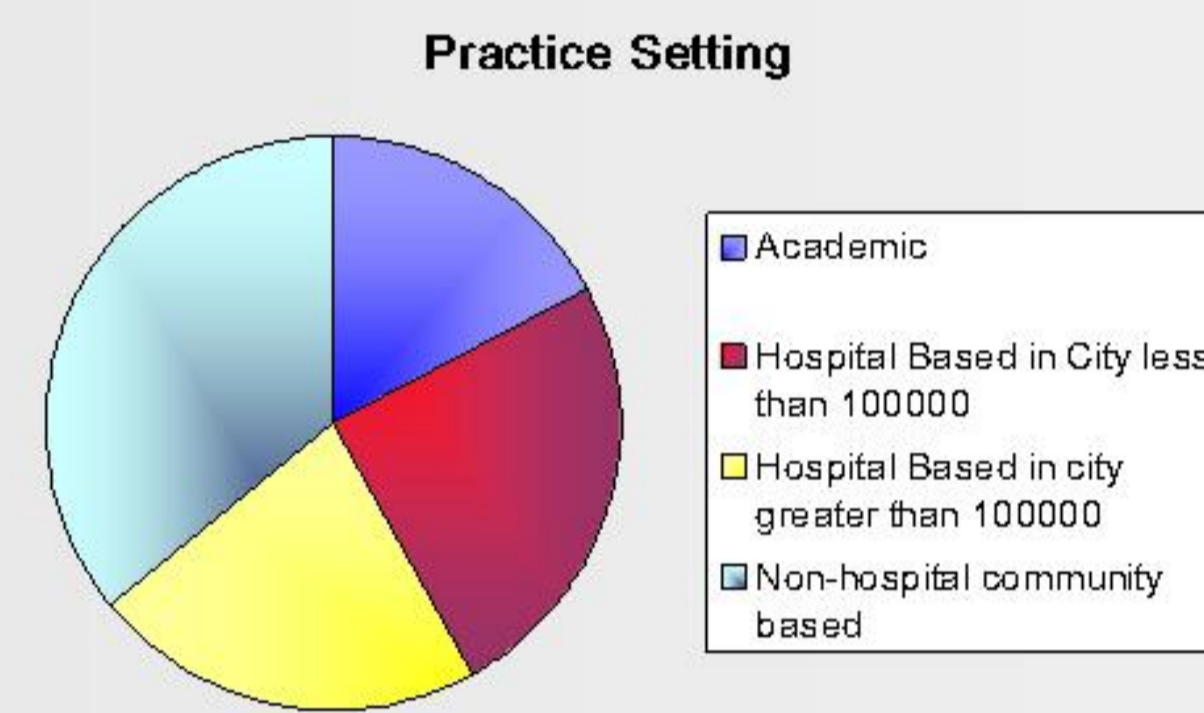
Prostate cancer remains an important cancer in the US with a high incidence and continued high mortality despite its long disease course. Hormone therapy has become an accepted standard of care, but there are few reports on what current radiation oncologist patterns of practice are. We investigated current radiation oncology patterns of practice in the United States with regard to hormone therapy and prostate cancer risk categories.

## Methods

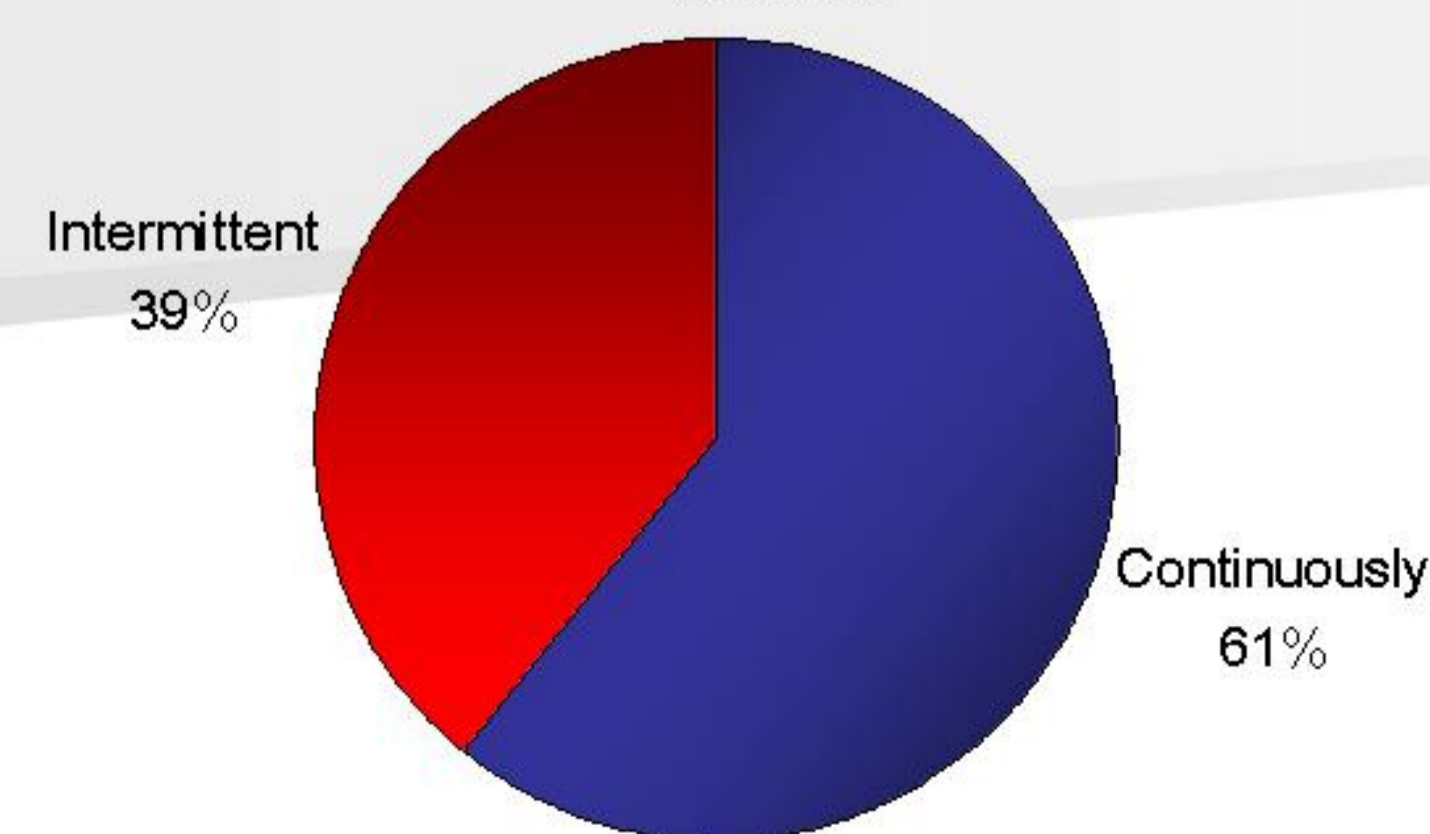
We conducted a national survey of ASTRO member radiation oncologists from 01/2009-04/2009 asking questions about hormone therapy use. We included a letter defining low, intermediate, and high risk prostate cancer. We sent out 3656 surveys and received 564 back, for a response rate of 15.4%. Among responders, 12.8% reported that they did not regularly treat prostate cancer and their responses were not evaluated, leaving 491 evaluable responses. We analyzed our data using SPSS software.

## Results

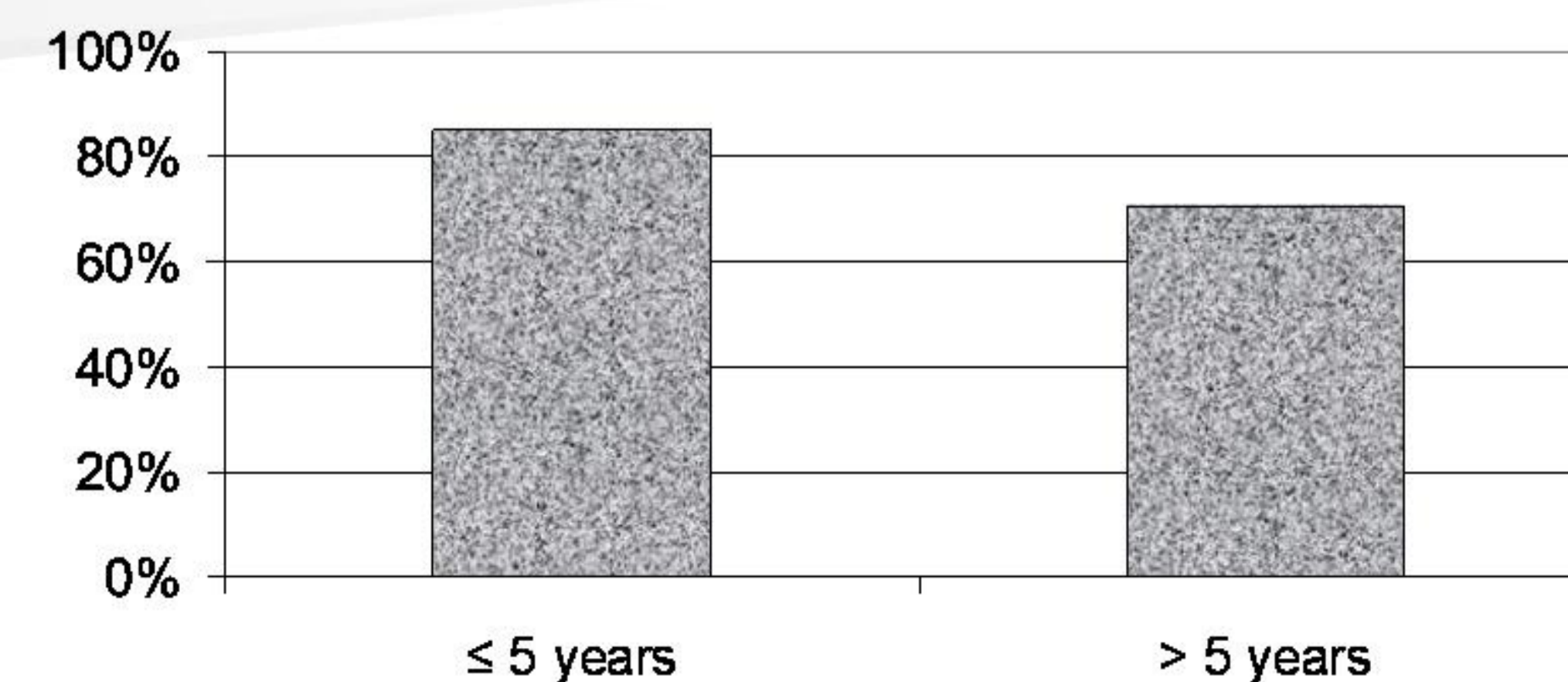
As expected, academic physicians were more likely to specialize and not treat prostate cancer. There were no significant differences between the practice patterns of academic physicians and non-academic physicians. The treatment of low risk prostate cancer with hormone therapy was rare, and it was more common among physicians practicing more than five years than those less than five years (5% vs 0%, p-value 0.016). The use of hormone therapy in intermediate risk prostate cancer was common, with 71.7% of respondents reporting their use most commonly for 3-6 months. Again, there was a difference between new physicians and their more experienced counterparts, with 85% of physicians practicing less than 5 years using hormones, and 70.6% of physicians practicing more than 5 years reporting hormone use in intermediate risk prostate cancer (p-value 0.008). Hormone therapy was universally indicated for high risk prostate cancer, with 98.4% (95% CI 97.8, 99) of physicians reporting its use with the most common planned length 18-36 months (68.3%).



Hormone Technique in Metastatic Prostate Cancer



Hormone Use in Intermediate Risk Prostate Cancer by Length of Time in Practice  
P-value = 0.008



## Conclusions

The use of hormone therapy among practicing physicians is very rare with low risk cancer, more controversial with intermediate risk prostate cancer, and universally accepted with high risk prostate cancer. We did not find differences in the patterns of practice of academic versus private practice physicians, although we did find differences between physicians who have been practicing less than five years and more than five years.