

Effect of 5-Alpha Reductase Inhibitors on PSA Response Following Prostate Ablation

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INTRODUCTION

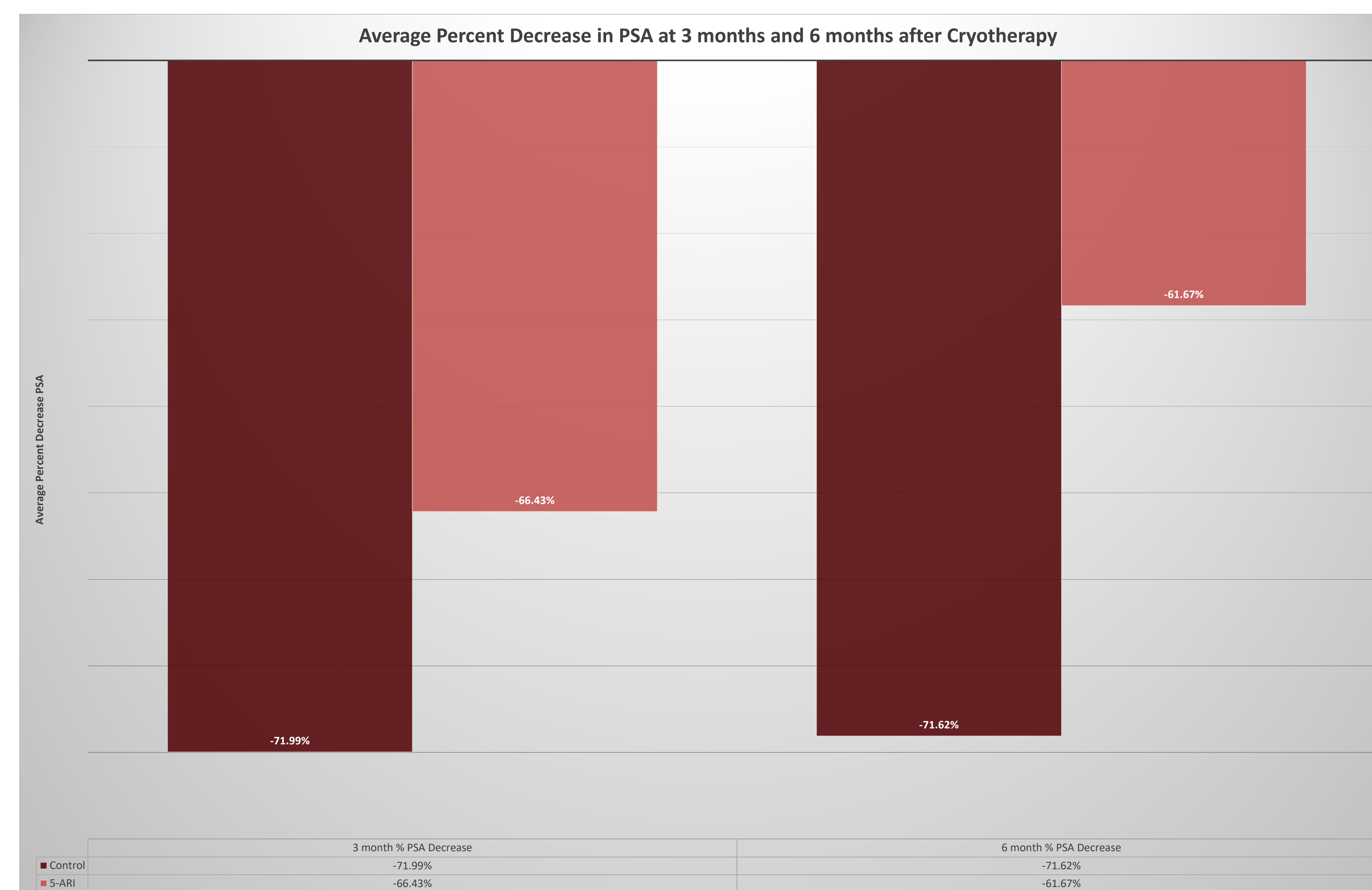
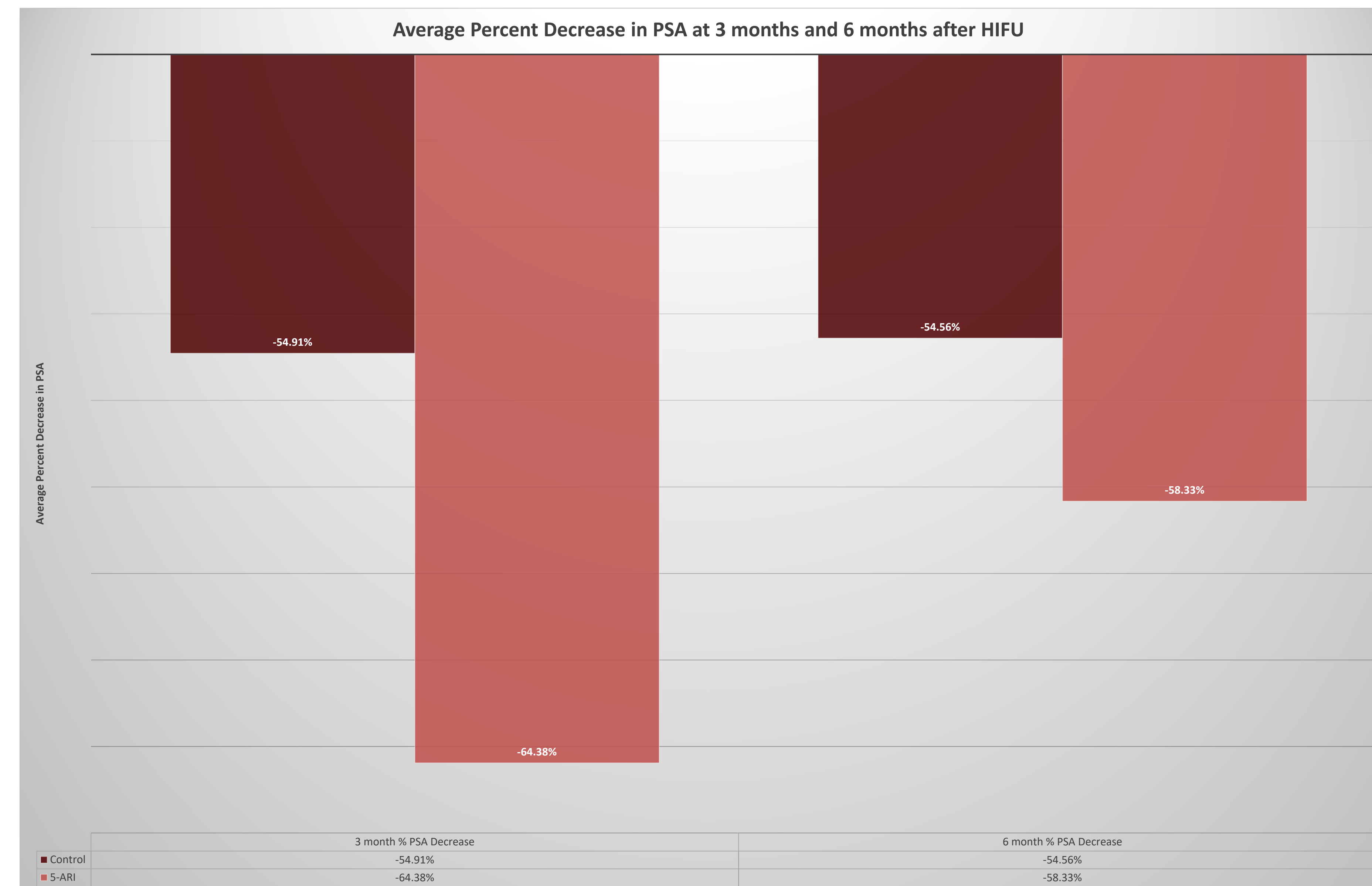
- Focal therapy is an acceptable option for those patients with intermediate-risk disease due to its low complication rates and high rates of continence and erectile function preservation.
- Follow-up after prostate ablation typically includes serial PSA measurements to evaluate treatment response. It is known that 5-alpha reductase inhibitors (5-ARI) are known to reduce PSA levels.
- Little is published regarding the effectiveness of ablation therapy in those patients previously taking a 5-alpha reductase inhibitor for lower urinary symptoms.

OBJECTIVES

- Evaluate how treatment with a 5-ARI prior to ablation therapy for localized prostate cancer affected PSA response at three and six months compared to those not taking a 5-ARI.

METHODS

- We performed a retrospective study of our prostate cancer database to identify patients undergoing primary cryotherapy or high intensity focused ultrasound ablation (HIFU) for localized prostate cancer.
- Patients were evaluated based on prostate cancer antigen (PSA) response from the time of initial treatment to the 3-month and 6-month visits post-treatment. Percent of average decrease of PSA was used to evaluate response, while treatment failure was defined as PSA > 2 of nadir.



RESULTS

- A greater PSA decrease was seen in the 5-ARI group than the control group when evaluating those undergoing HIFU therapy at both the three month (64.38% vs. 54.91%, $p=0.408$) and six-month visit (58.33 vs. 54.56%, $p=0.455$)
- Those undergoing cryotherapy saw greater PSA decreases in those not taking a 5-ARI prior to treatment.

RESULTS

- 93 men underwent primary prostate ablation including 73 undergoing cryotherapy and 20 undergoing HIFU.
- 5 out of 73 cryotherapy patients were taking a 5-ARI prior to ablation. 4 of 20 were taking a 5-ARI prior to HIFU treatment
- Median age at treatment was 71.
- Mean percent drop in post-ablation PSA for those not taking 5-ARI was 68.8% at 3 months. The mean percent drop in post-ablation therapy PSA for those taking 5-ARI was 65.5% at three months.
- At six months, mean percent drop in post ablation therapy PSA for those not taking a 5-ARI versus the 5-ARI group was 68.3% and 60.2% respectively.
- Treatment failure occurred in significantly more patients taking a 5-ARI, compared to those not taking a 5-ARI ($p=0.04$).

CONCLUSIONS

- Treatment with a 5-ARI prior to ablation therapy does not significantly change PSA response. However, PSA reduction may be greater in patients on 5-ARI who undergo HIFU compared to those undergoing cryotherapy. Treatment failure was significantly higher in patients on 5-ARI therapy.
- The association of prostate ablation treatment failure with 5-ARI requires further investigation