

POSITIVE PREDICTIVE VALUE OF PROSTATE FUSION BIOPSY

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INTRODUCTION:

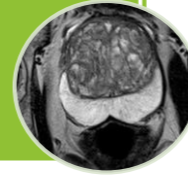
- Prostate cancer is the most frequently diagnosed cancer

Multiparametric prostate MRI (mpMRI) has become an important tool



- MRI helps in detecting suspicious cancer foci and assessing cancer stage and aggressiveness

MRI-ultrasound (MR/US) fusion biopsy was developed



- The European Society of Urogenital Radiology published the Prostate Imaging Reporting and Data System (PI-RADS)

Clinically significant cancer lesions visualized on prostate MRI into five categories.

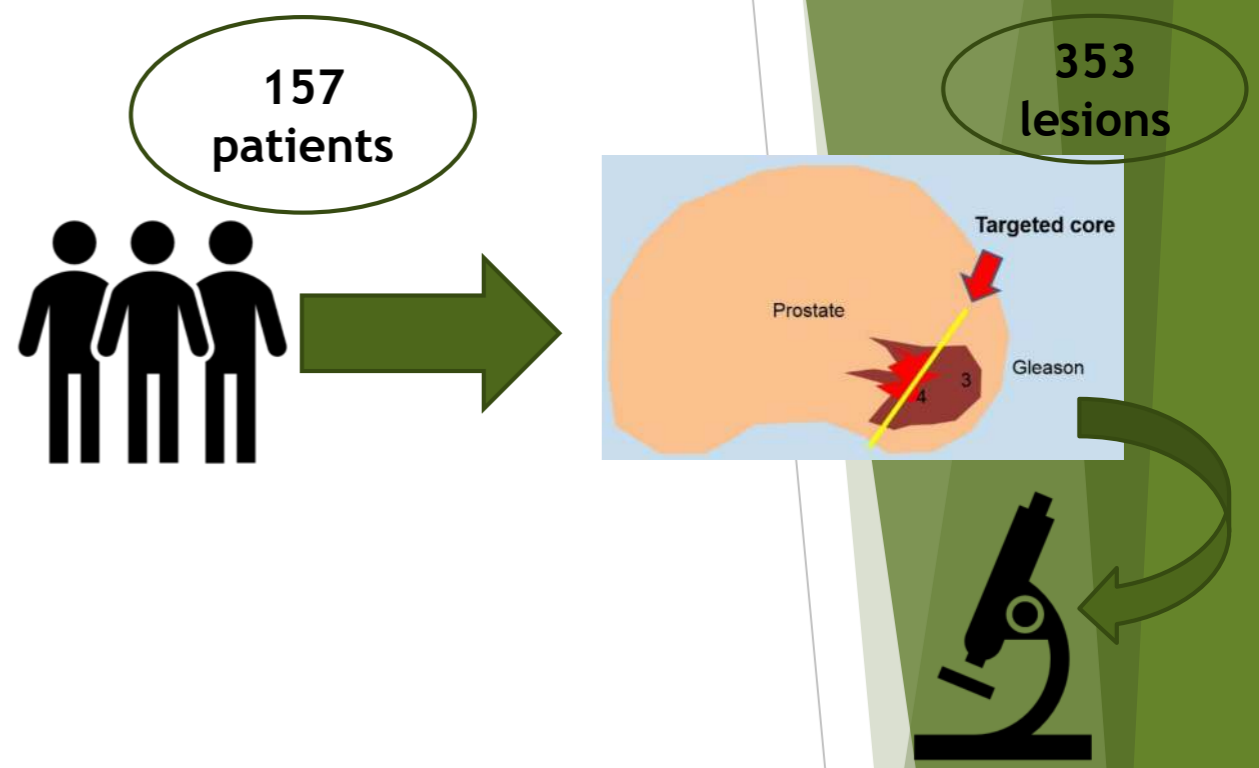


OBJECTIVES:

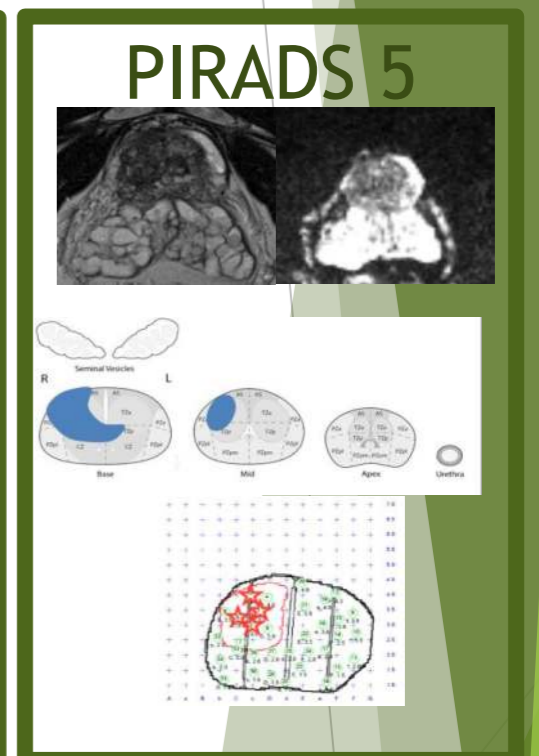
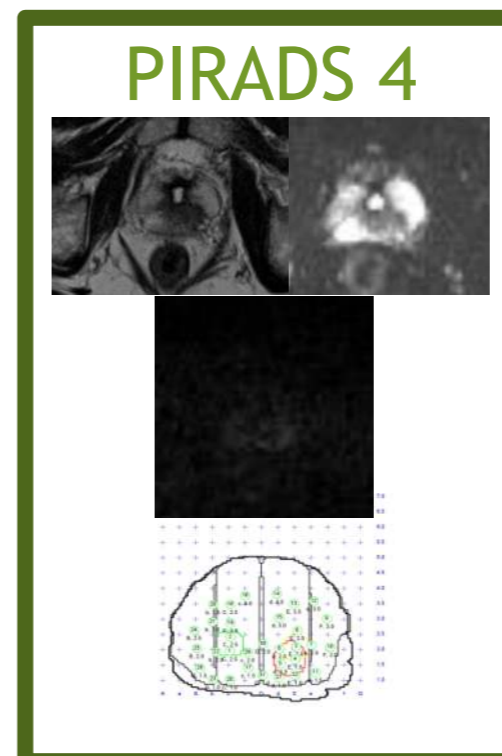
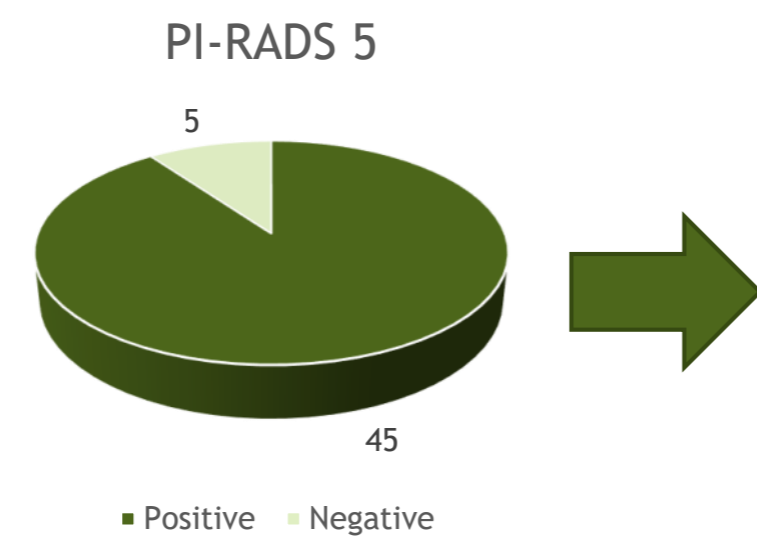
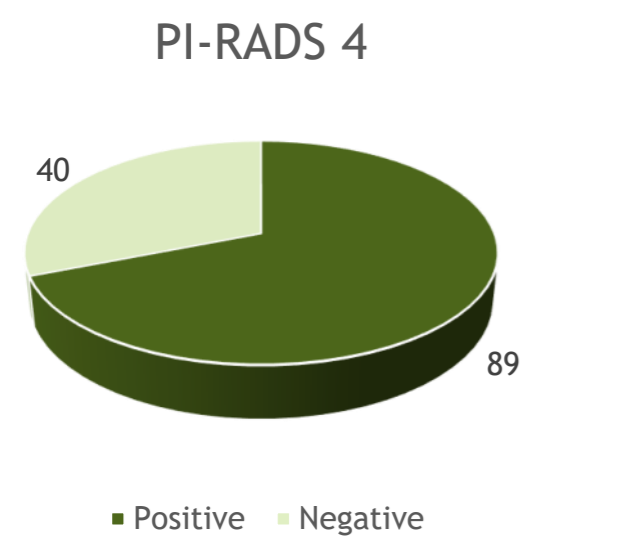
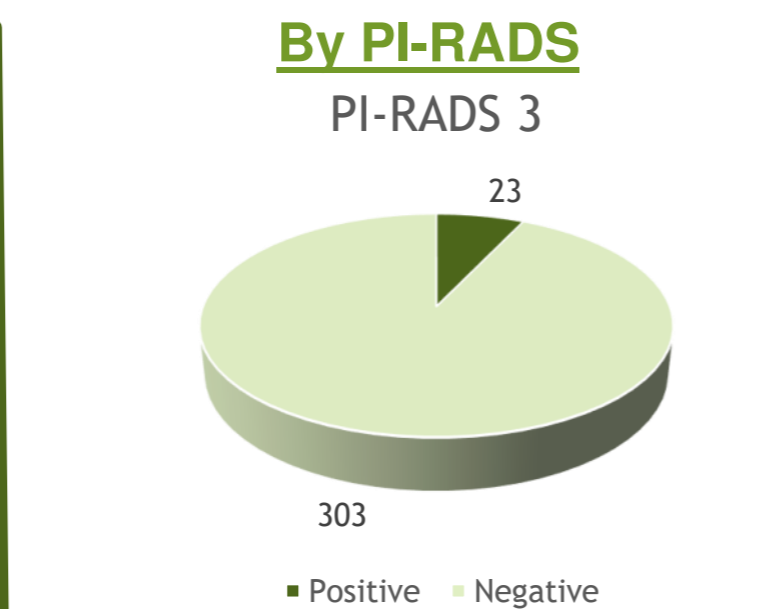
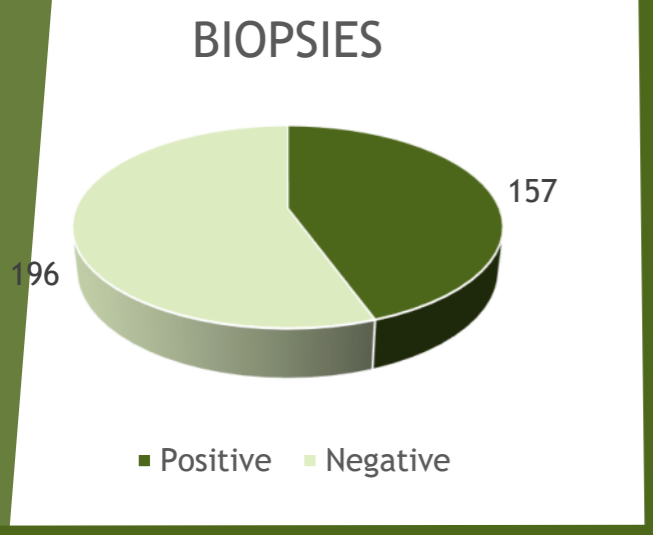
The objective is to evaluate the value of PI-RADS score in detecting prostate adenocarcinoma lesions by mpMRI fusion biopsy-transrectal ultrasound.

MATERIAL/METHODS:

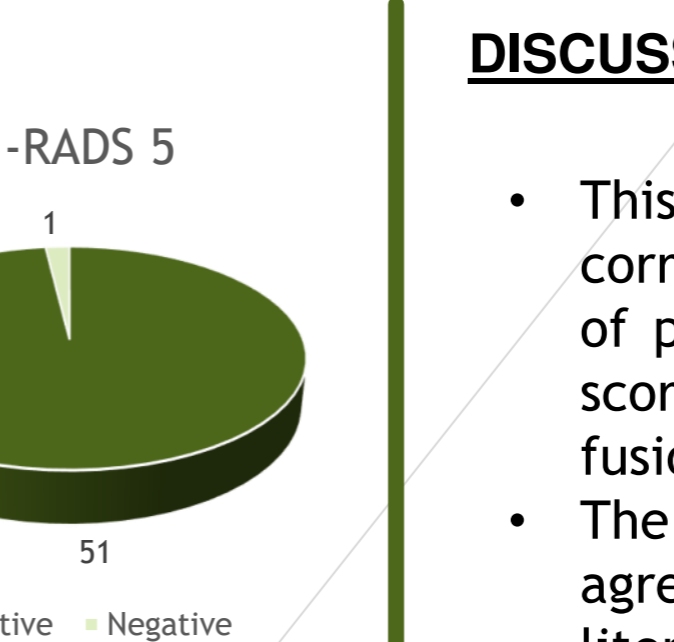
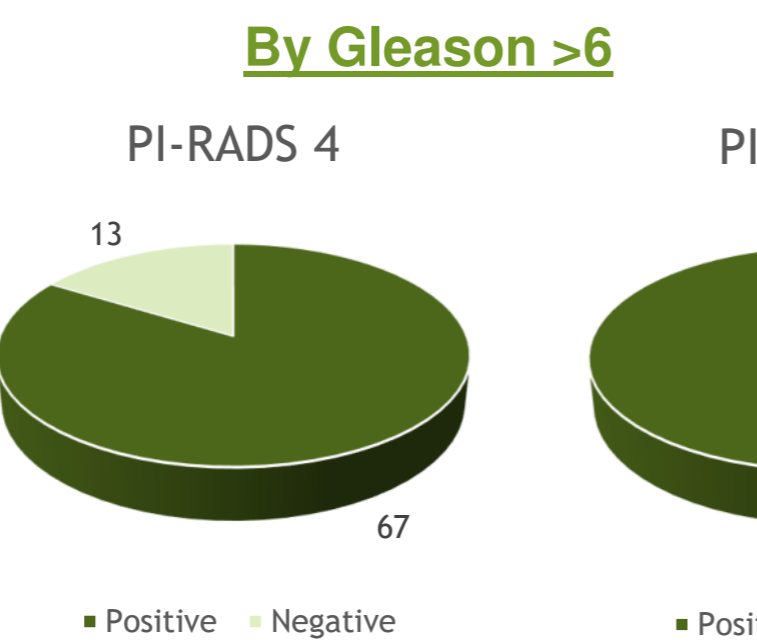
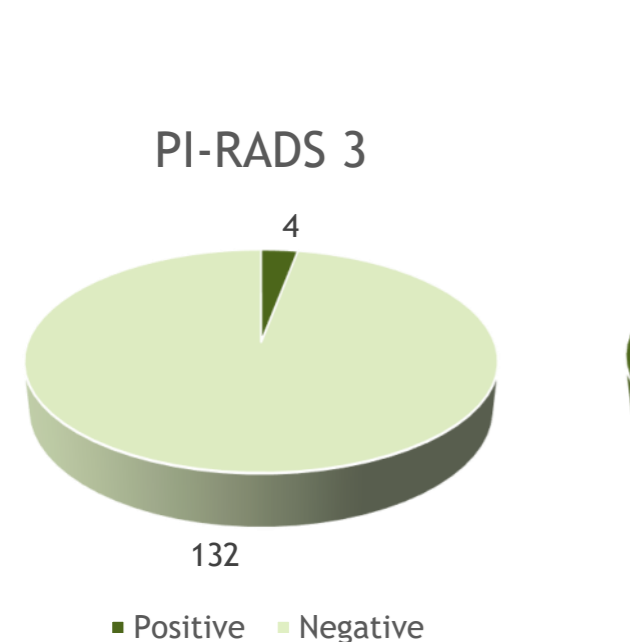
- Retrospective study
- 2015-2018
- 157 patients underwent fusion biopsy
- ~65 years old
- 353 PIRADS lesions between 3 and 5 were biopsied
- On average, 5 fragments were removed per suspected zone
- PI-RADS scores were correlated with biopsy results and their calculated positive predictive values



RESULTS:



Positive predictive value (by PIRADS)		Positive predictive value (by Gleason >6)	
PI-RADS 3	11%	PI-RADS 3	2%
PI-RADS 4	77%	PI-RADS 4	67%
PI-RADS 5	97%	PI-RADS 5	89%



DISCUSSION/CONCLUSION:

- This study demonstrated a correlation between detection of prostate cancer and PIRADS score in patients undergoing fusion biopsy.
- The results obtained were in agreement with the existing literature