The rate of PIRADS-3 is not a proxy of the quality of mp-MRI of the prostate: results of a single, high volume radiologist series

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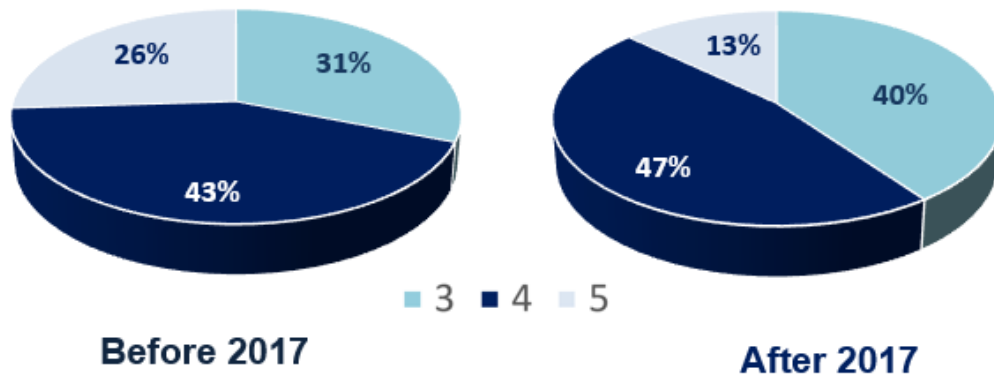
Materials and Methods

Patients characteristics

Variable	Overall (n=402)
Age at biopsy Median (range)	65 (59-72)
PSA Median (range)	6.4 (4.4-9.3)
Prostate volume Median (range)	48 (35-68.8)
N. target sample Median (range)	3 (3-4)
N. random sample Median (range)	12 (10-12)
Overall csPCa	197 (49)
csPCa at TBx	178 (44.3)
csPCa at SBx	158 (39.3)

Trend of PI-RADS over time

Before 2017: 26%, 31%, 43%
After 2017: 13%, 40%, 47%

■ 3 ■ 4 ■ 5

Before 2017   **After 2017**

<u>AIM</u>: Our hypothesis is that radiologist experience is not necessarily associated with a decreasing rate of PI-RADS 3 over time. Rather, detection of clinically significant prostate cancer (csPCa) should be correlated with radiologist expertise
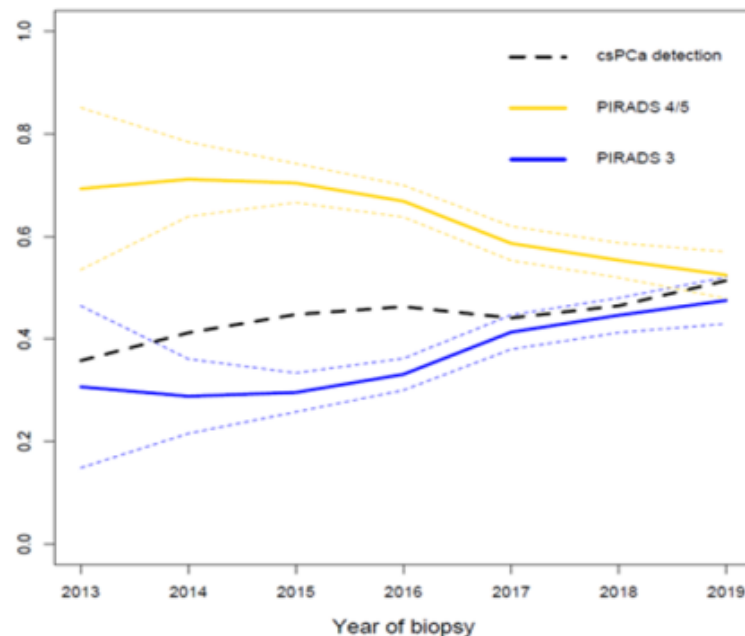
Results

MVA predicting PI-RADS 3

Predictors	OR (95% CI)	p-value
Year of biopsy	1.22	0.04
PSA density	0.004	<0.001
Age	0.9	<0.001
Biopsy history		
Naïve	Ref	-
Repeat biopsy	0.9	0.7
Active surveillance	0.8	0.6

MVA predicting PI-RADS ≥ 4

Predictors	OR (95% CI)	p-value
Year of biopsy	0.8	0.04
PSA density	25	<0,001
Age	1.07	<0.001
Biopsy history		
Naïve	Ref	-
Repeat biopsy	1.13	0.7
Active surveillance	1.28	0.6

Proportion of PI-RADS and csPCa detection over time

The rate of PI-RADS 3 is not necessarily a proxy of radiologist expertise since it increased over time even in the hands of a single, highly experienced reader. Rather, the detection of csPCa over time should be considered as the main endpoint and a more accurate proxy of radiologist and urologist expertise