

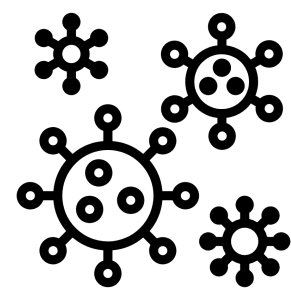
Moderate Delay in Radical Prostatectomy Does Not Impact Oncological Outcomes of High-Risk Prostate Cancer

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Introduction



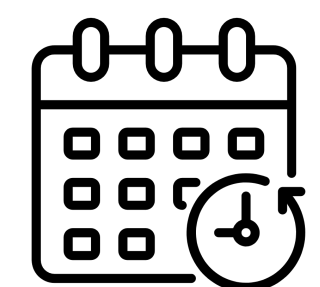
We aimed to determine the impact of delay in the treatment of prostate cancer, as those expected to occur as a result of the COVID-19 pandemic, on oncological outcomes.

Methods

Study Population: January 2012 to February 2020

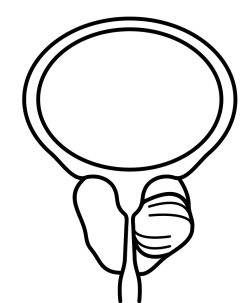


Within the MUSIC registry, 8355 patients with intermediate risk prostate cancer and 2774 patients with high risk prostate cancer, who underwent radical prostatectomy (RP) within 1 year of diagnosis.

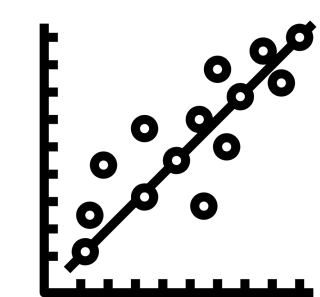


Based on time from diagnosis to RP, patients were classified into immediate (within 3 months) or delayed RP groups (3.1-6 months, 6.1-9 months, 9.1-12 months).

Outcomes of Interest:



Adverse pathology (AP) at RP, defined as extraprostatic extension (EPE), seminal vesical invasion (SVI), or pN1 disease, and time to biochemical recurrence (BCR, defined as postoperative PSA ≥ 0.2).



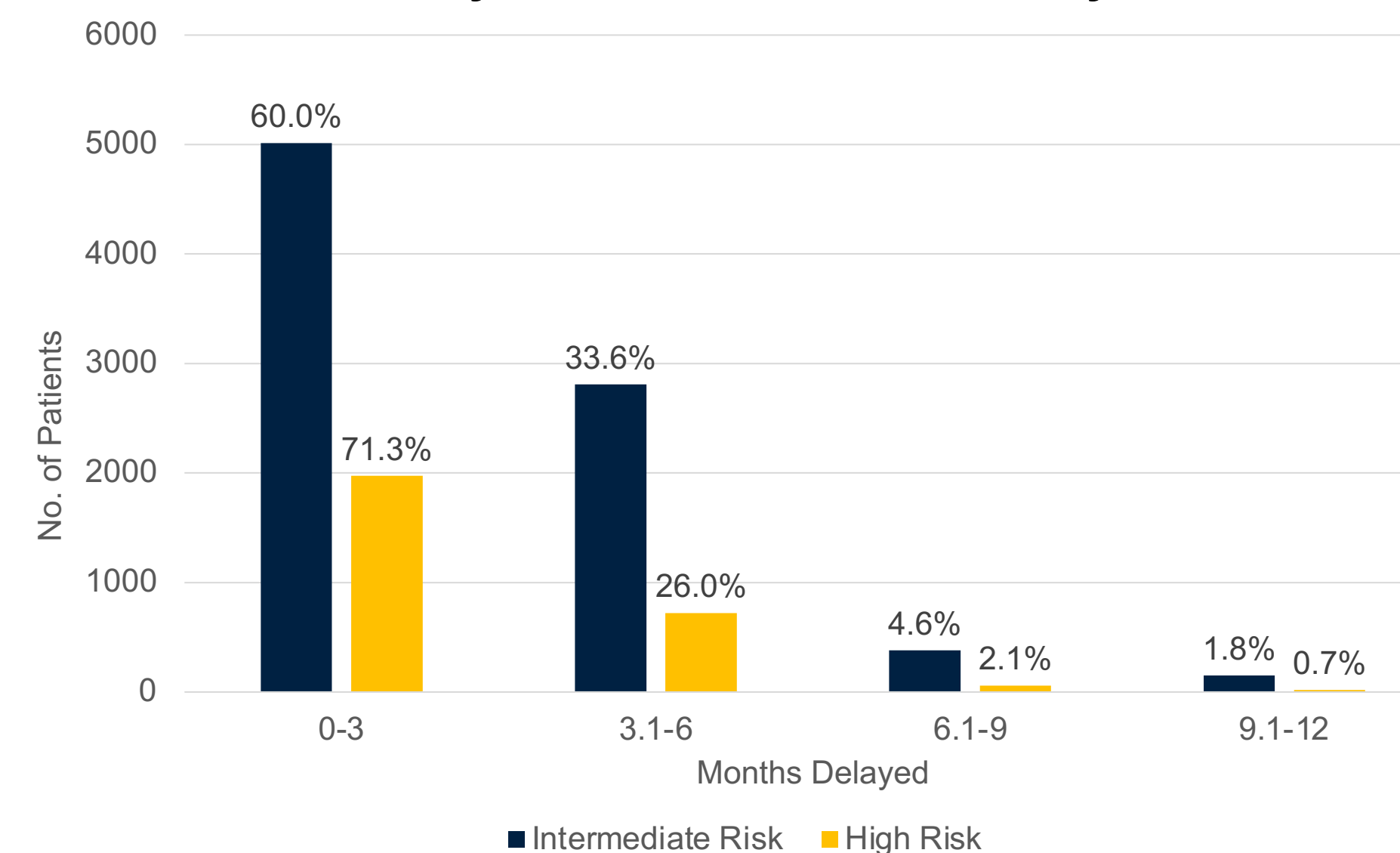
Within each risk group, multivariable regression models were performed to compare outcomes between immediate and delayed patients, controlling for patient characteristics.

Results

Patient Demographics

	Intermediate risk	High risk	p-Value
No. patients	8355	2774	
Biopsy Grade Group			
GG1	374 (4.5%)	50 (1.8%)	<0.001
GG2	5457 (65.3%)	185 (6.7%)	
GG3	2521 (30.2%)	189 (6.8%)	
GG4	-	1477 (53.3%)	
GG5	-	870 (31.4%)	
Clinical T stage			
T1	6145 (74.0%)	1567 (56.9%)	<0.001
T2	2155 (26.0%)	1010 (36.6%)	
T3/4	-	179 (6.5%)	
Race			
White	6257 (74.9%)	2069 (74.6%)	0.99
AA	1053 (12.6%)	354 (12.8%)	
Other	223 (2.7%)	74 (2.7%)	
Unknown	822 (9.8%)	277 (10.0%)	
Age, median (IQR)	63.0 (58.0-68.0)	65.0 (60.0-69.0)	<0.001
PSA, median (IQR)	5.8 (4.5-8.1)	7.9 (5.4-15.4)	<0.001

Delays in Radical Prostatectomy



Results

Oncologic Outcomes

	Intermediate Risk	High Risk
Adverse Pathology	Only delays of 6-9 months resulted in increased risk of AP (OR 1.31, p=0.03).	Delaying surgery up to 12 months showed no significant difference in the risk of AP.
Biochemical Recurrence	Only delays of 9-12 months resulted in increased risk of BCR (HR 1.76, p=0.02).	Delaying surgery up to 6 months showed no significant difference in the time to BCR.

Conclusion

A delay of treatment of <6 months from the time of diagnosis was not associated with an increase in adverse pathology at RP or BCR.

Acknowledgements

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