

# Do Patients Undergoing Successive Prostate Biopsies Over Time Need Repeat Rectal Swab?

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## Objective

- Primary: Investigate the incidence of change in susceptibility profile of pre-biopsy rectal swabs in a given patient over time
- Secondary: Assess whether increased number of prior biopsies increases risk of ciprofloxacin resistance

## Methods

- Retrospectively reviewed 377 patients undergoing biopsy between 2017 and 2019
- Patients with 2 or more prior rectal swabs included for analysis

## Results

Table 1. Prior Swab Characteristics	n	%
Number of patients with $\geq 2$ cultures	136	-
Total number of rectal cultures	305	-
Overall ciprofloxacin resistant cultures	45	15.7
Comparison of successive swabs		
Instances of no change in susceptibility	153	82.7
Instances of change in susceptibility	32	17.2
Sensitive to resistant	16	8.6
Resistant to sensitive	11	5.9
Remained resistant but with new profile	5	2.7

Figure 1. Effect of Time on Change in Profile

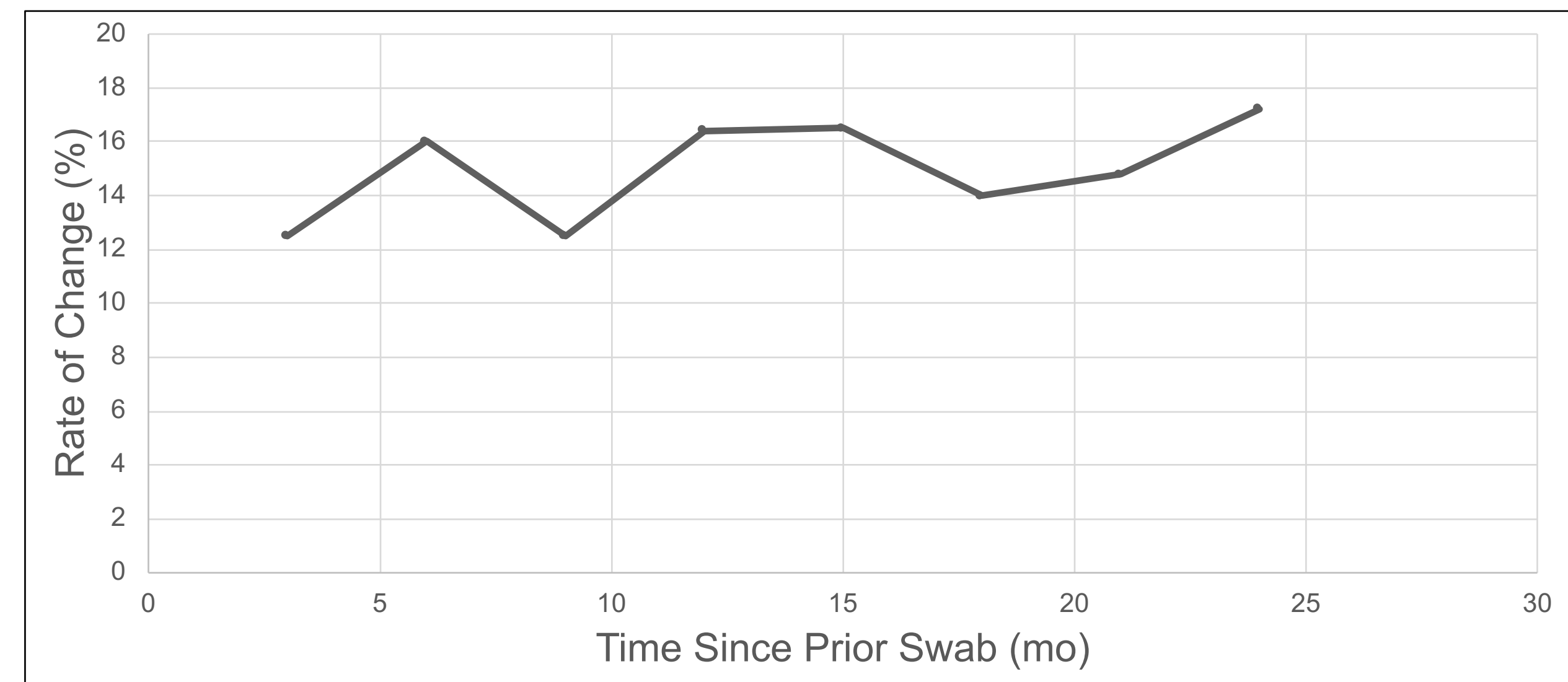
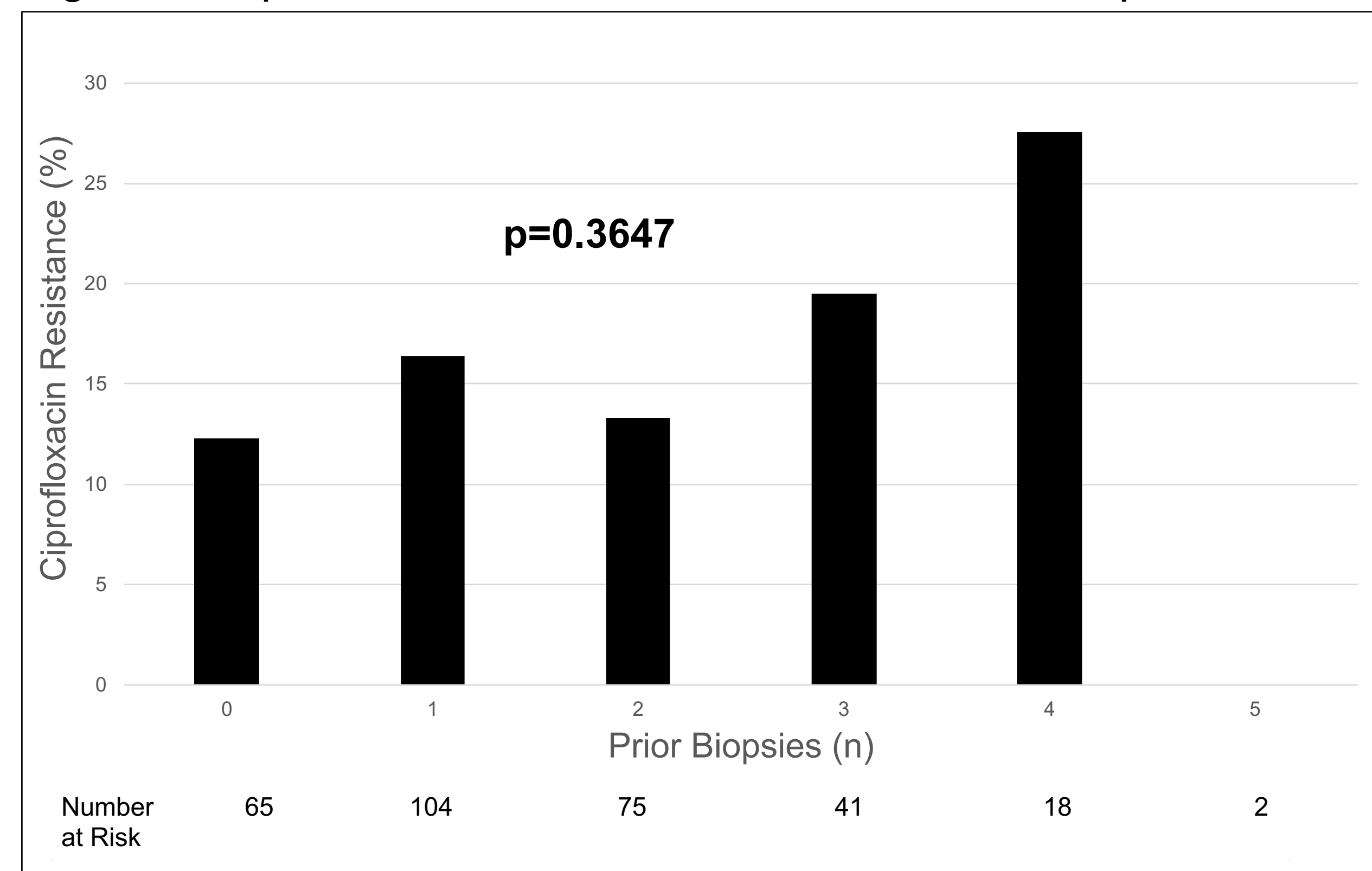


Figure 2. Ciprofloxacin Resistance based on Prior Biopsies



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## **Summary**

1. Approximately 1 in 6 patient will have a change in their rectal swab susceptibility between successive biopsies
2. The incidence of change in rectal swab susceptibility is not influenced by time
3. Increased number of prior biopsies is not associated with ciprofloxacin resistance

## **Conclusion**

- Repeat rectal swab should be performed prior to all successive TRUS prostate biopsies