



## PD05-10 AUGMENTED ANTIBIOTIC PROPHYLAXIS AND POST-BIOPSY SEPSIS FOR PRIVATELY INSURED MEN UNDERGOING PROSTATE BIOPSY

Rebecca Steinberg BA<sup>1</sup>, Lauren Kipling MPH<sup>2</sup>, KC Biebighauser Bens MD<sup>1</sup>, Dattatraya Patil MBBS MPH<sup>1</sup>, Mark Henry MD<sup>1</sup>, Akanksha Mehta MD MS<sup>1</sup>, Christopher Filson MD MS<sup>1,3</sup>

Dept of Urology, Emory University School of Medicine, Atlanta, GA
Dept of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA
Winship Cancer Institute, Emory Healthcare, Atlanta, GA

American Urological Association Annual Meeting 2020





## **Disclosures**

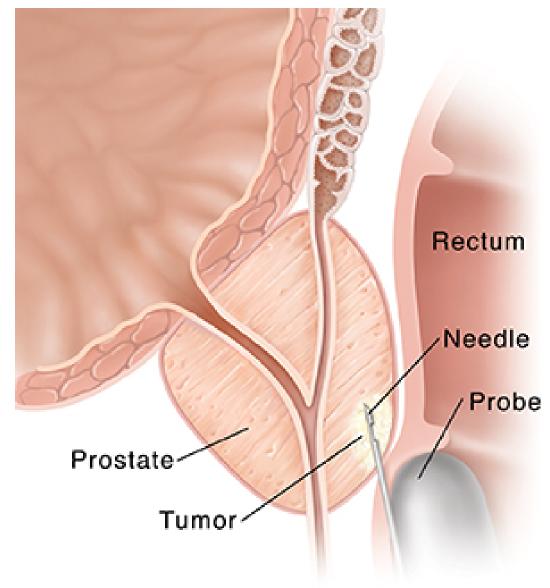
- American Cancer Society (CPF; MRSG-CPHPS-18-1)
- No other relevant relationships to disclose.







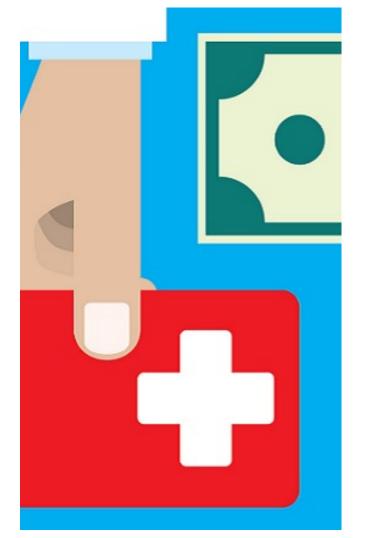


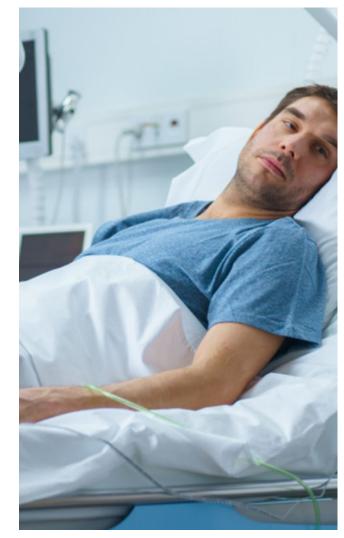




















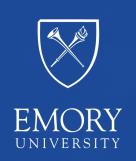


# **Objectives**

 Assess infectious outcomes in men who underwent prostate biopsy, including sepsis.

• Determine if use of augmented or parenteral prophylactic antibiotics was associated with lower risk of infection.

• <u>Hypothesis:</u> Men who were given augmented antibiotic prophylaxis would be less likely to suffer from infectious complications.





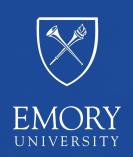
### **Methods**

#### Database

MarketScan Commercial Claims and Encounters (2009-2015)

#### Cohort

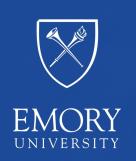
- N= 430,696 men with prostate biopsy
  - N = 379,226 with insurance 3 months prior and 15 days after
  - N = 319,121 with no prior UTI/sepsis
  - N = 163,831 men with claims associated with antibiotic prophylaxis (Analytic cohort)



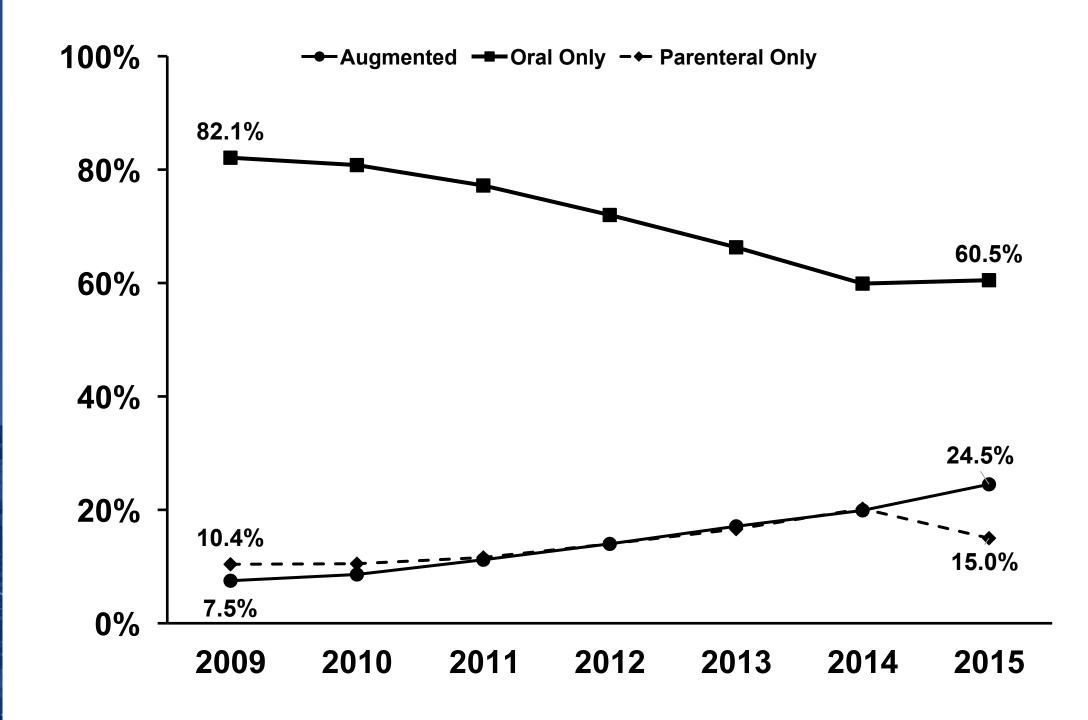


## **Methods**

- Exposure = Antibiotic regimen
  - Oral only
  - Augmented (oral + parenteral)
  - Parenteral only
- Outcomes (within 14 days post-biopsy)
  - Any infectious complication
  - Bacteremia/sepsis
- Statistical Analysis
  - Bivariate analysis and multivariable regression

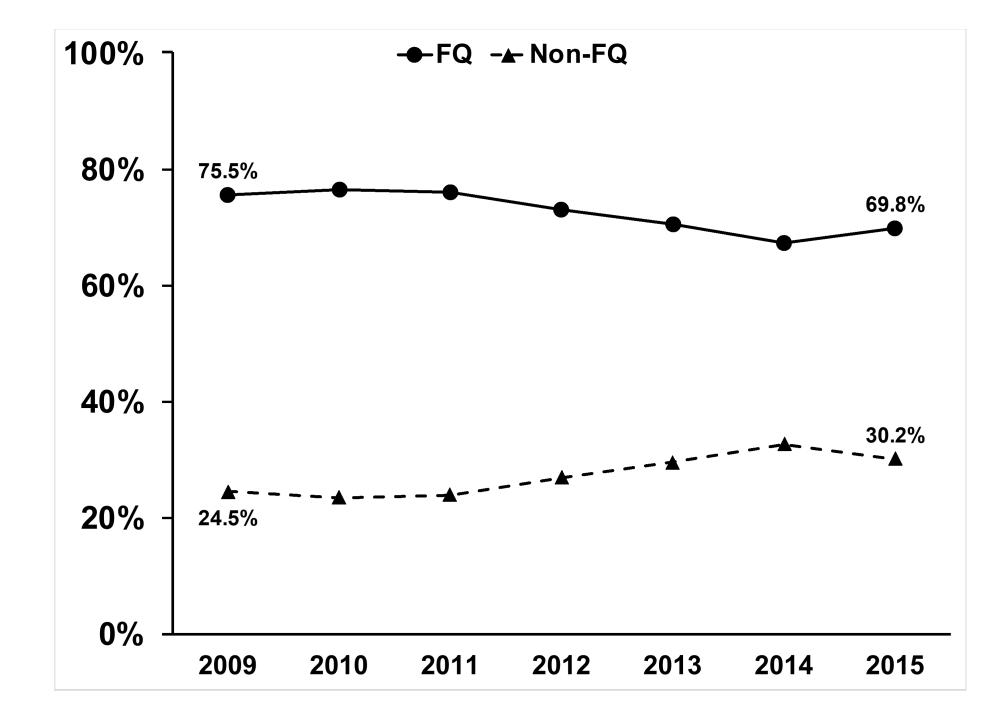






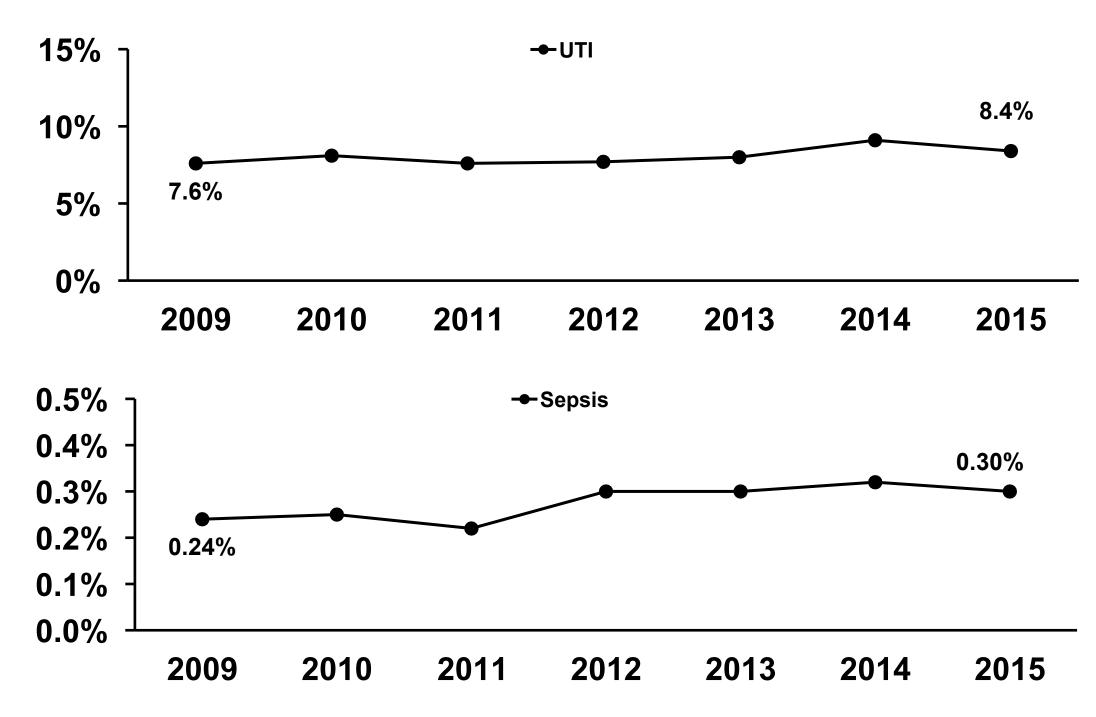






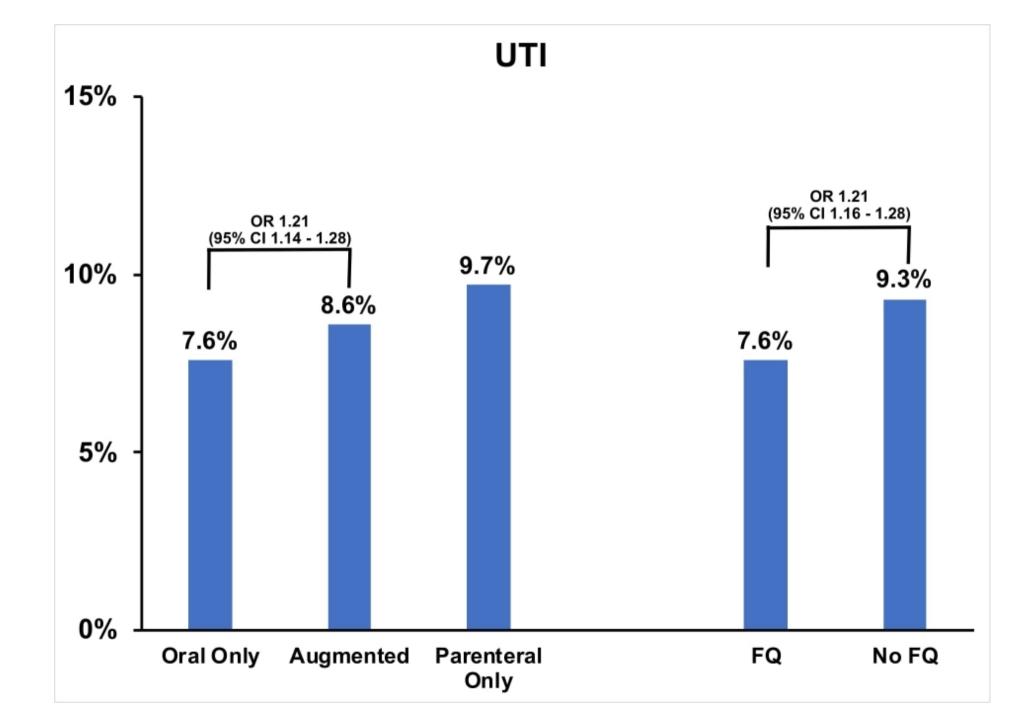






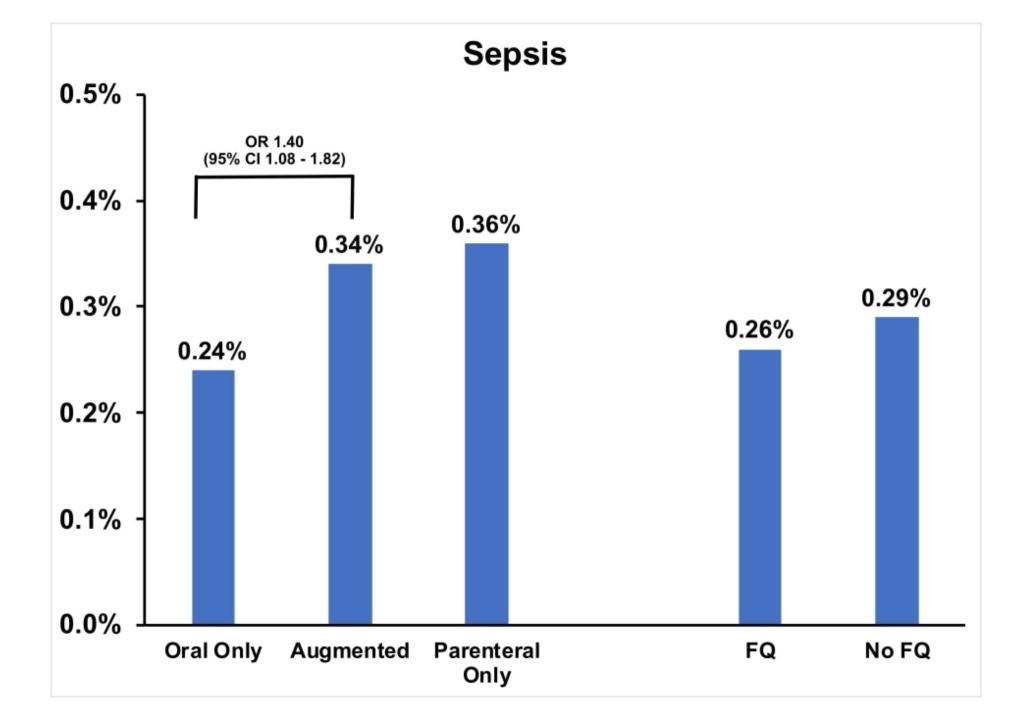
















## Conclusions

 Augmented antibiotic regimens not associated with decreased risk of postbiopsy UTI or sepsis.

 Fluoroquinolone use was associated with decreased risk of post-biopsy UTI or sepsis.





## Limitations

- Correlation not causation
  - Antibiotic resistance increasing
  - Consistent association over time and geographically?
- Selection bias
  - Excluded large cohort of men without pharmaceutical claims
- Rare event
  - ~50 sepsis cases per year





# Thank you!