

# **Prophylactic Antibiotic Use in Non-Operative Facial Fractures**

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#### OBJECTIVE

Our aim is to determine if prophylactic antibiotics for 0-24 hours, 25-72 hours, or > 72 hours post-injury for nonoperatively managed facial fractures decreases the incidence of fracture-associated infections. We will also examine the incidence of antibiotic associated adverse drug events.

### INTRODUCTION

Facial fractures make up a significant proportion of injuries in trauma patients. Approximately 3 million individuals suffer craniofacial trauma in the United States every year.

Prophylactic antibiotics have been employed to decrease infectious complications; however, up to 60% of antibiotics prescribed in the emergency department are inappropriate.

It is widely accepted that antibiotics should be administered for the shortest duration to minimize inadvertent sequelae of antibiotics. The overuse and misuse of antibiotics has been linked to organism resistance.

Complications such as ventilator associated pneumonia (VAP), candida infections, catheter-associated infections such as urinary tract infections and central line infections, and clostridium difficile colitis have been linked with antibiotic overuse.

Therefore, development of evidence-based practice guidelines are crucial to providing quality patient care for facial fractures.



METHODS

This is a multicenter prospective observational study. Methodist Dallas Medical Center developed the protocol and is the lead site.

The study is being conducted by The American Association for the Surgery of Trauma-Multi-Institutional Studies (AAST-MIT).

This site will collect, supervise, and monitor data collection, storage, and statistical analysis.

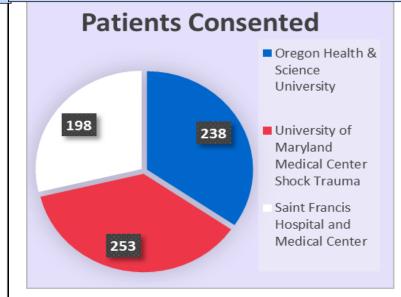
Saint Francis Hospital, as well as other participating sites will collect study data utilizing the hospital trauma registry and Epic for subject inclusion



### ACKNOWLEDGEMENT

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## STUDY PROGRESS



Saint Francis Hospital is the third largest contributor to this nationwide study, accounting for 198 of 1463 patients enrolled.

AAST-MIT is the premier academic trauma surgery organization in the US and publishes the *Journal of Trauma and Acute Care Surgery*.

There are now 16 sites currently enrolling patients for this study.