



# Assessment of Tenecteplase Order Set Implementation for Ischemic Stroke

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## BACKGROUND

- Intravenous thrombolytic therapy is the drug treatment of choice for acute ischemic stroke (AIS). However, thrombolytic initiation can be a costly and complicated therapy due to inconsistent or confusing dosing parameters, bleeding risks, and need for re-administration.
- Recent clinical trials have shown tenecteplase to be a safe alternative to alteplase administration with benefits for use that include, increased fibrin specificity and longer half-life than alteplase. This allows for single bolus administration and simple dosing parameters of 0.25mg/kg and maximum dose of 25mg.
- In 2023, Northeast Georgia Health System (NGHS) implemented a system-wide thrombolytic agent conversion from alteplase to tenecteplase in qualifying AIS patients.

## OBJECTIVES

- To evaluate the safety and appropriate use of the tenecteplase order set for ischemic stroke at our institution.

## METHODS AND DESIGN

- A retrospective 6-month post-implementation review of all patients who received tenecteplase in our five-hospital system between the implementation of the order set on March 7, 2023, to October 31, 2023.

### PRIMARY ENDPOINT

- To assess safe prescribing practices of tenecteplase

### SECONDARY ENDPOINT

- To identify post-implementation opportunities for protocol improvement

## RESULTS

Figure 1. Indication for Use

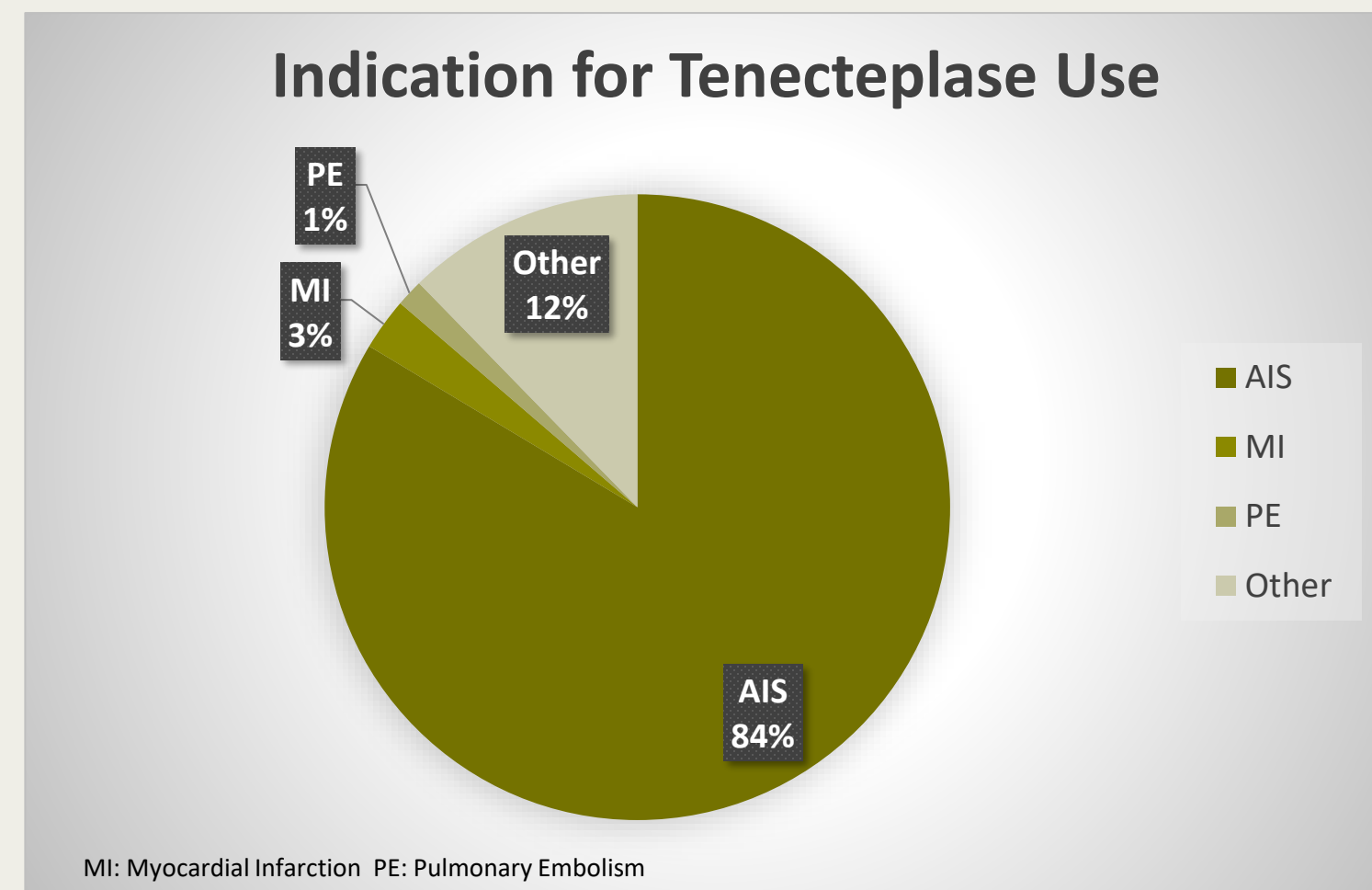


Figure 1. Adverse Drug Events

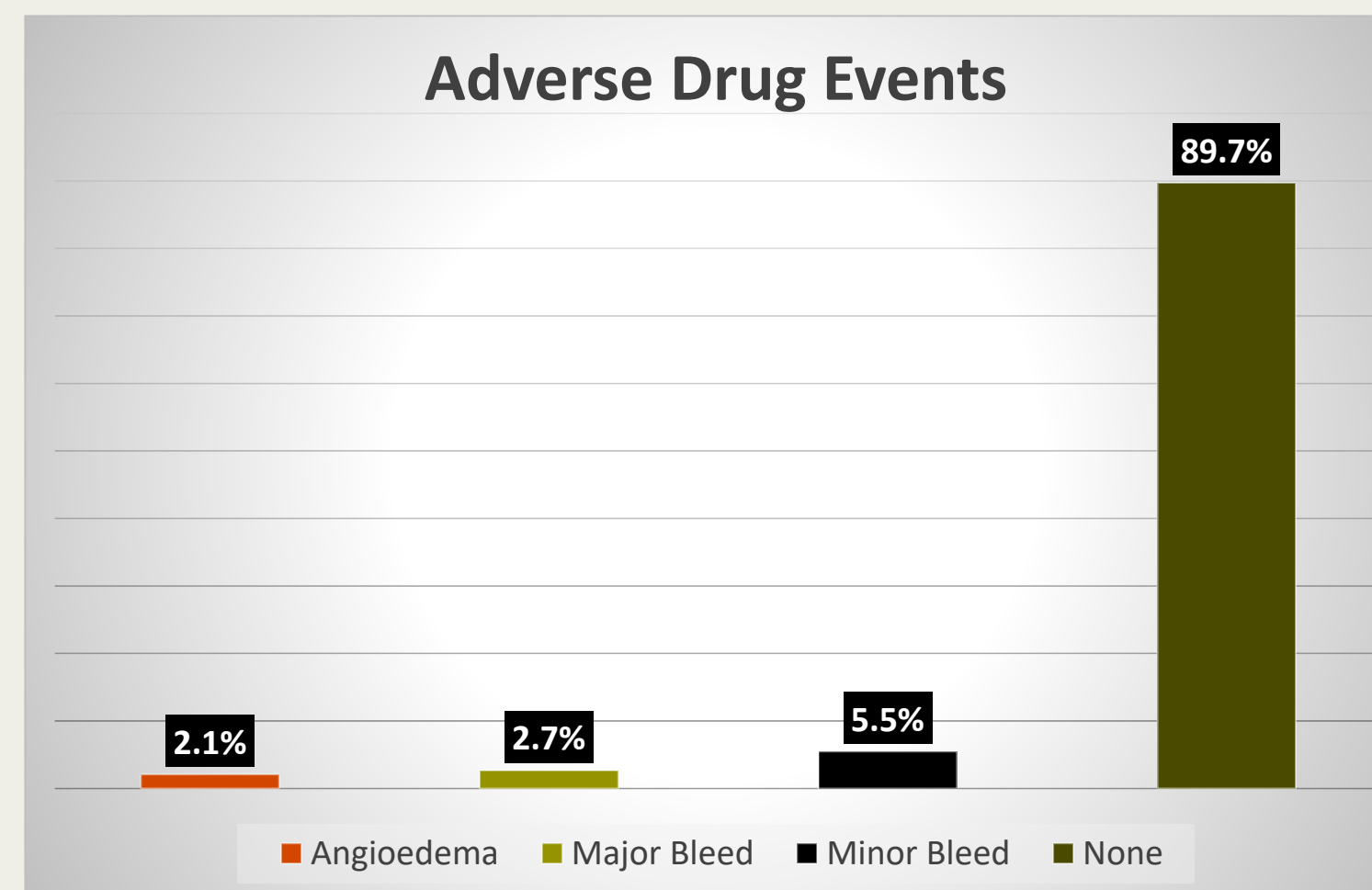


Table 2. Major vs. Minor Bleed Classification

Type	Classification
Major Bleed	Reversal agent required
Minor Bleed	No reversal and minimal intervention required

## RESULTS

Table 1. Baseline Demographics

Baseline Demographics	N=146
Median Age (years)	65.5
Male	76 (52%)
Race	
• Black	24 (16.4%)
• White	113 (77.4%)
• Other/Not specified	9 (6.2%)
Median Weight (kgs.)	82.9

Values reported in number (N) and percentage (%)

## DISCUSSION

- Overall utilization of tenecteplase for AIS was appropriate including dosing and indication.
- Adverse events were consistent with or lower than those reported in the literature for angioedema and hemorrhage.
- There are opportunities to further educate staff and providers regarding appropriate indication for use, dosing per protocol, and the risks associated with unnecessary use of thrombolytic therapy.

## CONCLUSION

- This retrospective review suggests that tenecteplase is a safe alternative to alteplase administration for acute ischemic stroke with adverse event rates similar to those reported in existing literature.

## CONTACT INFORMATION

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