**Title:** TEG Talk: Using Thromboelastography to Guide Pharmacologic Treatment Decisions

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**Learning Objectives:**

1. Identify thromboelastography (TEG) tracing components and interpret results
2. Recognize patient populations and disease states in which TEG may influence clinical decision making
3. Discuss literature regarding the use of TEG to guide pharmacologic treatment decisions

**Abstract:**

Thromboelastography (TEG) is a test that measures the efficacy of coagulation and can characterize the clotting cascade in real time. TEG is proposed to help manage bleeding by capturing a full picture of clot strength and formation. There are several advantages to using TEG over traditional coagulation assays such as assessment of platelet contribution, correlation with hypercoagulability and bleeding, evaluation of lysis, and the option for a point-of-care assay known as rapid TEG (r-TEG). Since its development in 1948, TEG has demonstrated utility in cardiac surgery, liver disease, and trauma resuscitation, which in combination with the limitations of traditional coagulation assays, have led to exploration in detecting pharmacologic agents and guiding treatment decisions. The lack of studies aimed at comparing TEG to standard coagulation assays in practice and standardizing ranges for TEG tracing components limits the role of TEG in the clinical setting.

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**Audience Response Questions:**

1. JF takes dual antiplatelet therapy with aspirin and clopidogrel at home. Which tracing component would be most affected by JF’s home medications?
   1. R
   2. K
   3. MA
   4. LY30
2. Based on the studies reviewed, what test would you use to distinguish between dabigatran and AFXa?
   1. TEG 6s
   2. Standard TEG
   3. r-TEG
   4. TEG-PM
3. Based on the case studies reviewed, which agents would you consider TEG or r-TEG to guide reversal?

I. Heparin

II. Dabigatran

III. VKA

* 1. I only
  2. II only
  3. I and II only
  4. I and III only