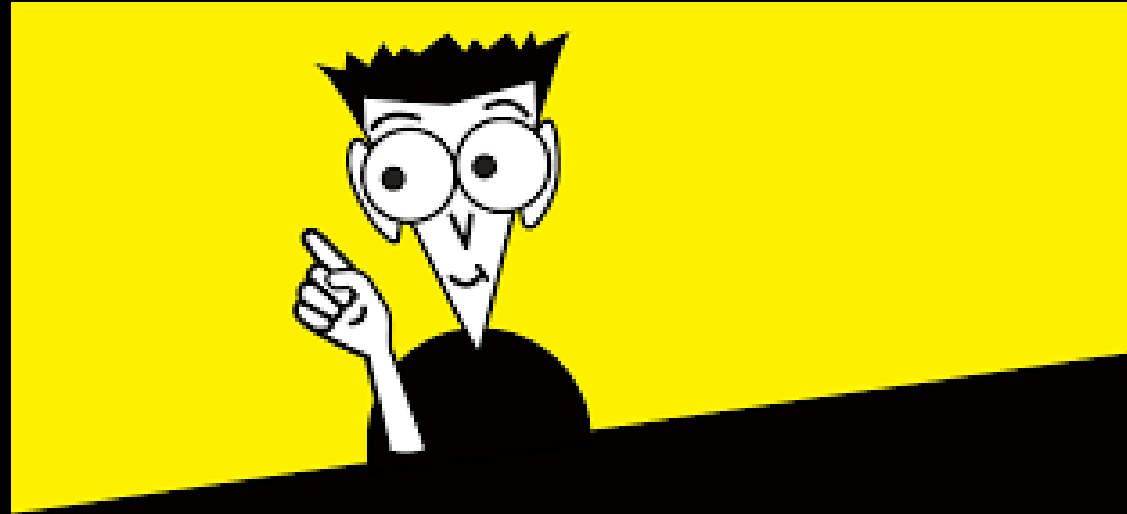


Damn Easy: Thromboelastography for Dummies



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Assistant Professor, Emergency Medicine
Denver Health Medical Center
University of Colorado School of Medicine
@gannonsungar

Disclosures



Objectives

- Demystify viscoelastic assays with a simple analogy
- Describe component administration in TEG-guided resuscitation



Thromboelastography (TEG)

Thromboelastography (TEG)

Traditional “Measures”
of Coagulation

Thromboelastography (TEG)

Traditional “Measures”
of Coagulation

- PT/INR
- PTT
- Plts

Thromboelastography (TEG)

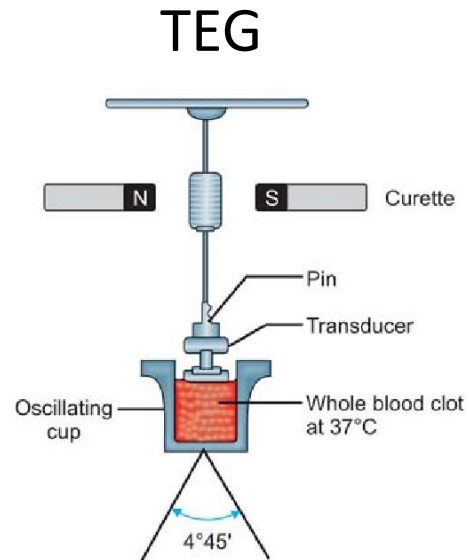
Traditional “Measures”
of Coagulation

- PT/INR } Plasma
- PTT } Plasma
- Plts } Cellulate

Thromboelastography (TEG)

Traditional “Measures”
of Coagulation

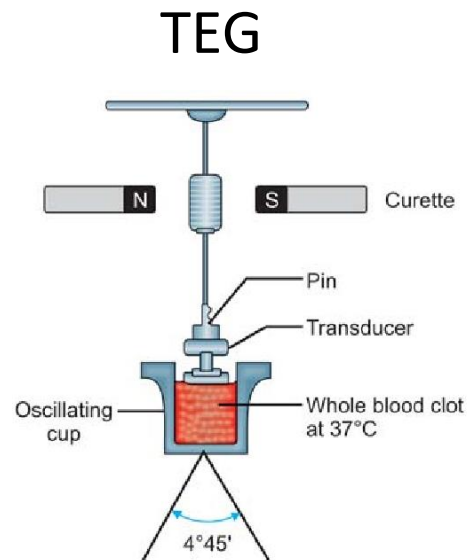
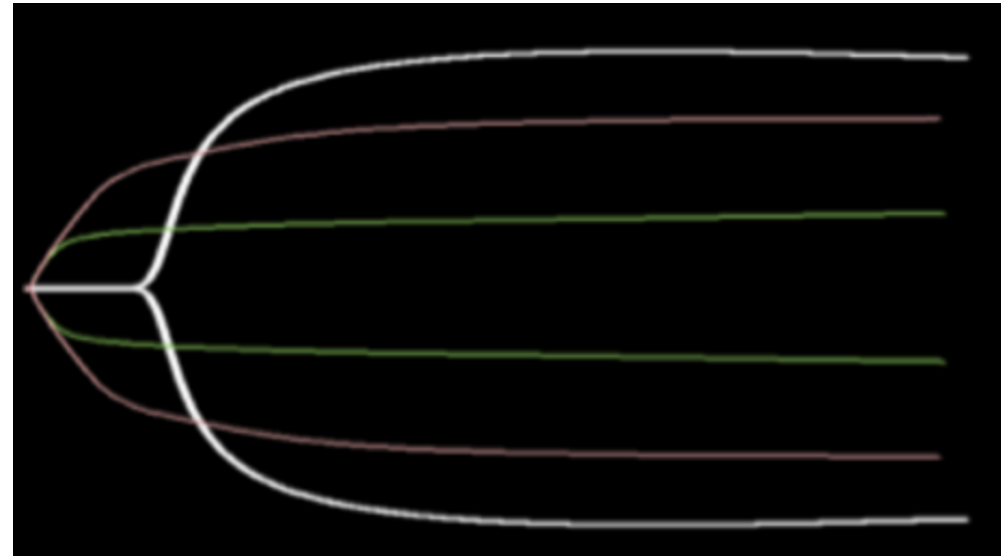
- PT/INR } Plasma
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Thromboelastography (TEG)

Traditional “Measures” of Coagulation

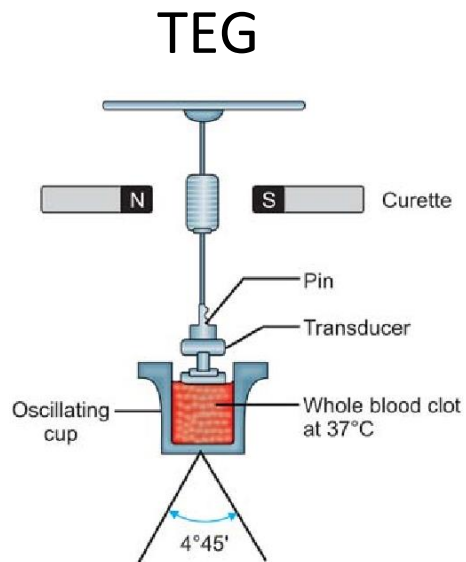
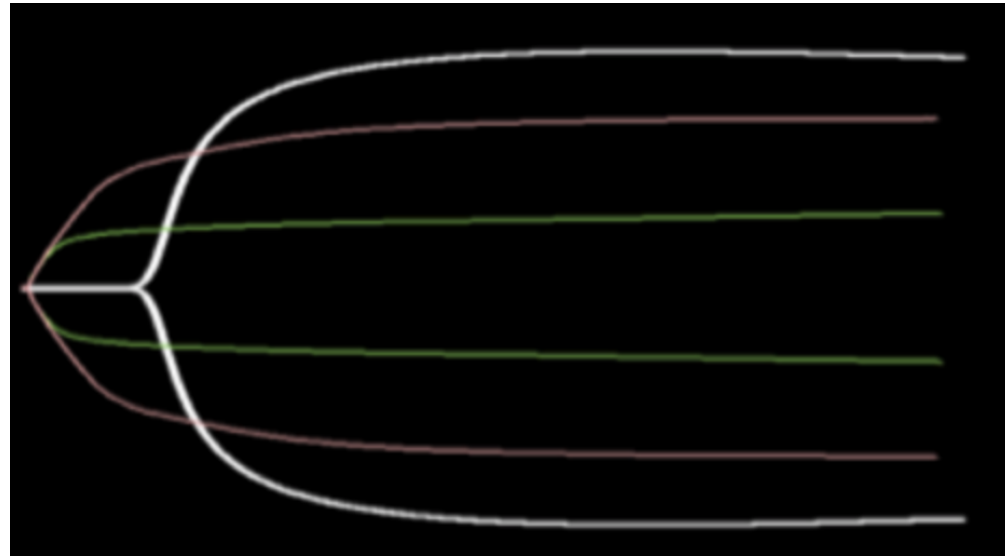
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Thromboelastography (TEG)

Traditional “Measures” of Coagulation

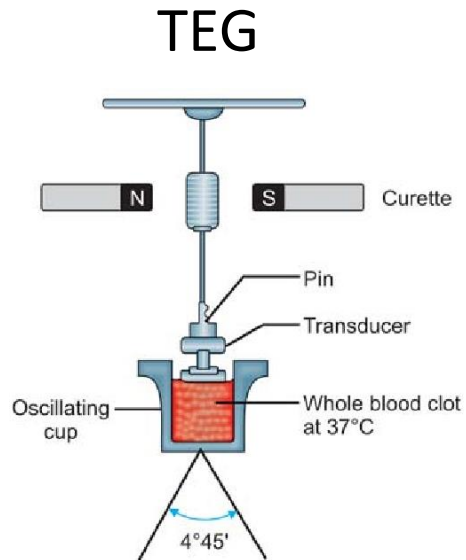
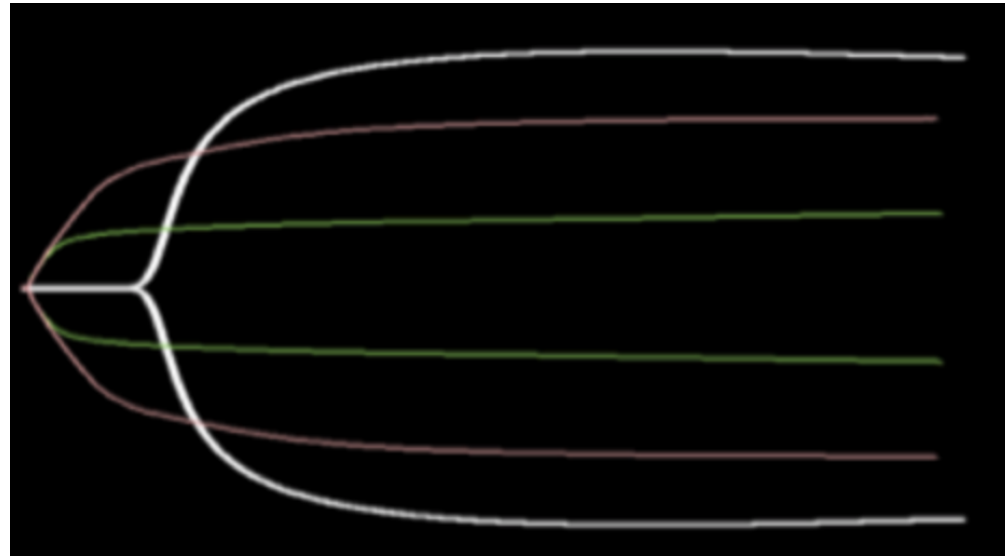
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Traditional “Measures” of Coagulation

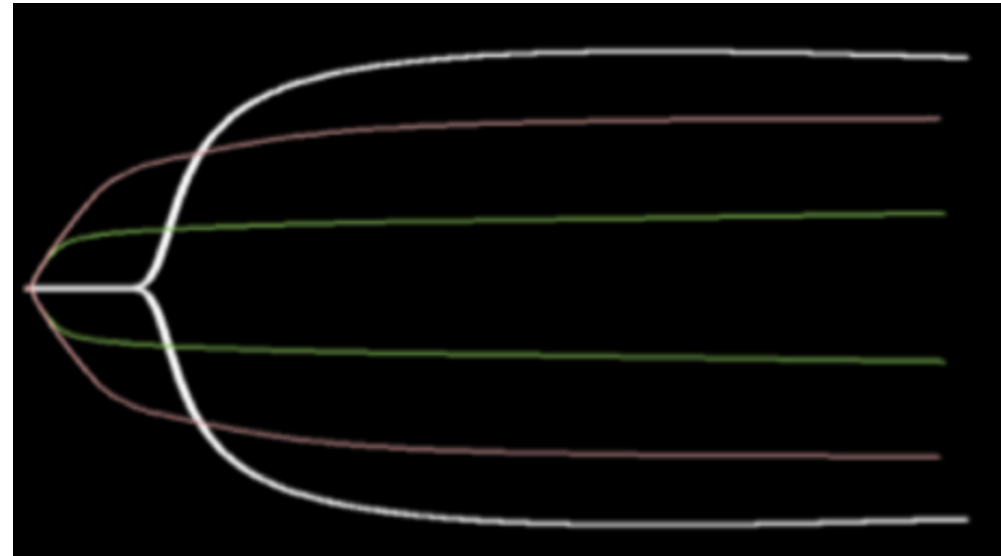
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Thromboelastography (TEG)

Traditional “Measures” of Coagulation

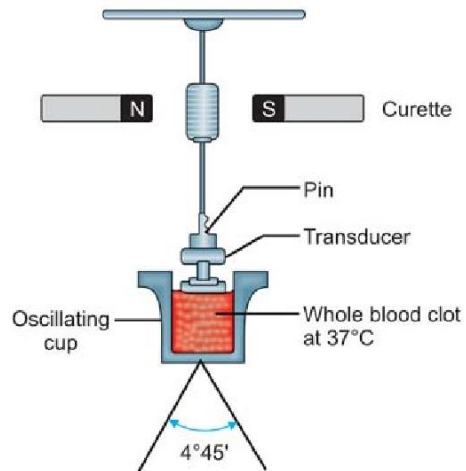
- PT/INR } Plasma
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Coagulation Factors



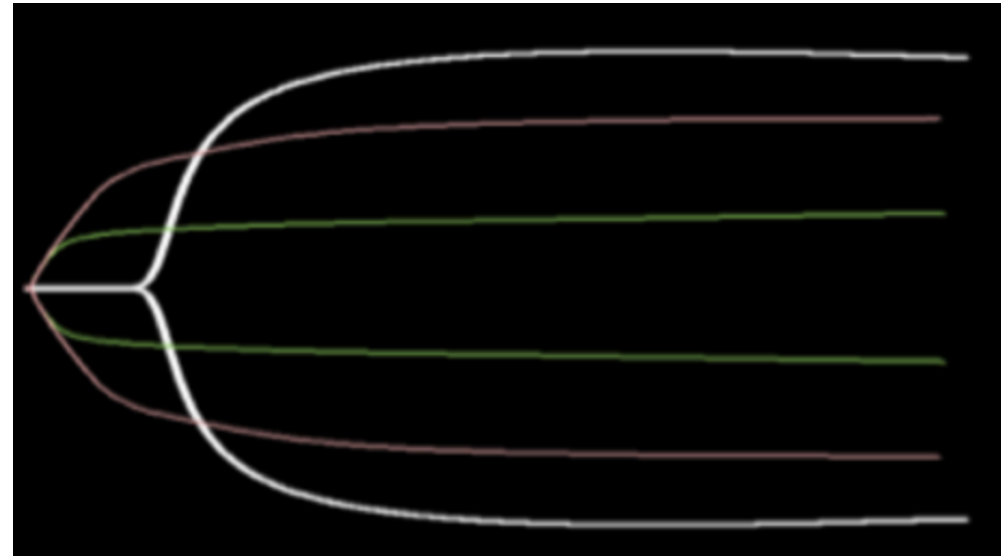
TEG



Thromboelastography (TEG)

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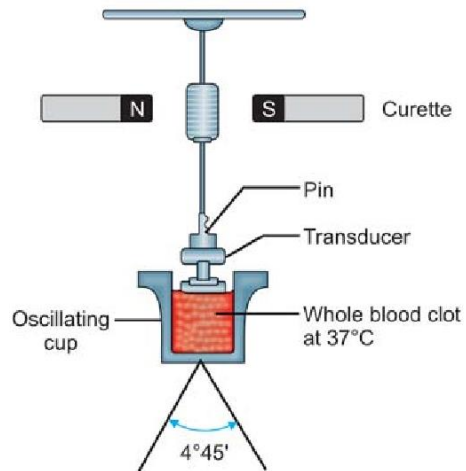
Coagulation Factors



Fibrin Meshwork



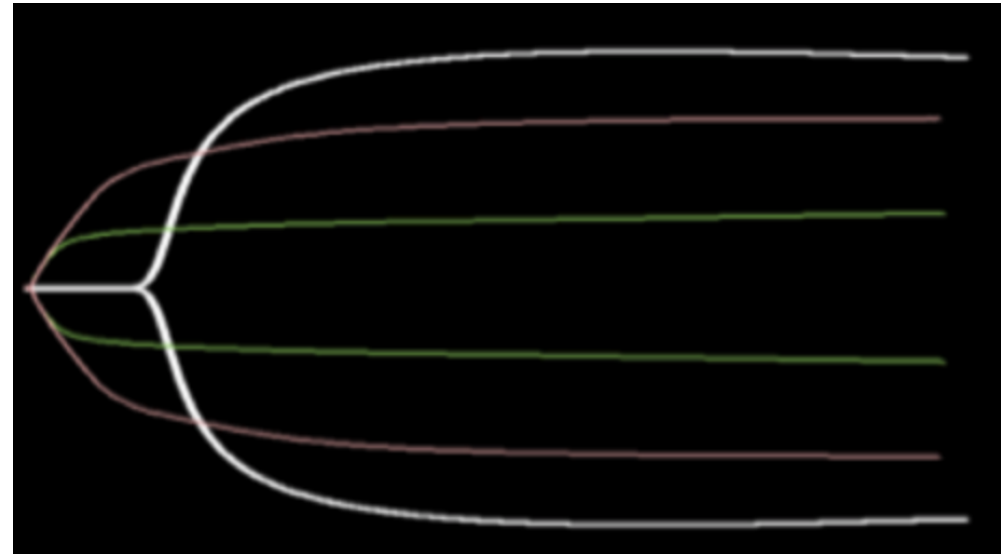
TEG



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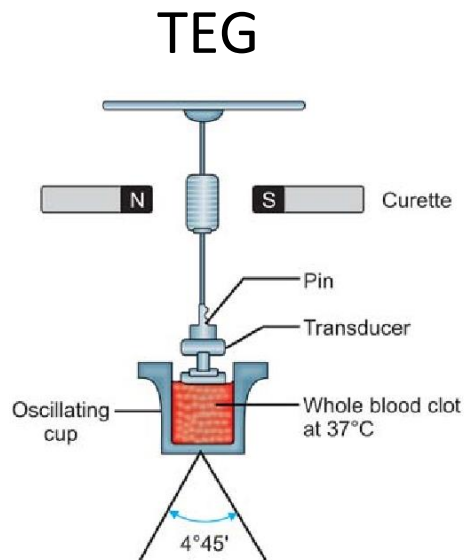
Coagulation Factors



Fibrin Meshwork



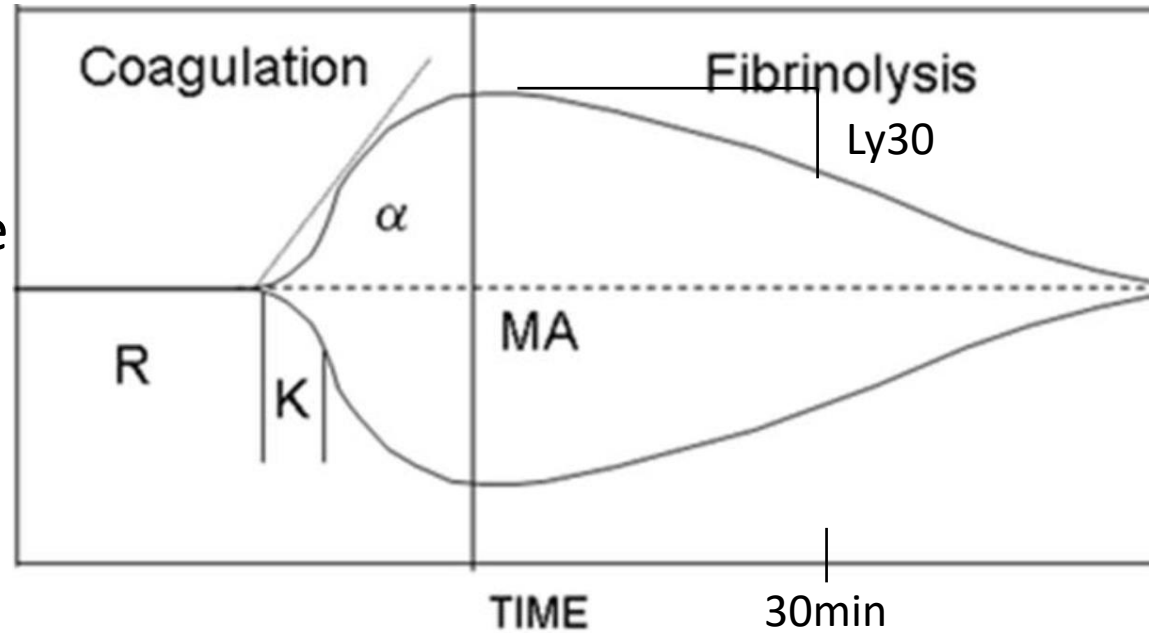
Platelets



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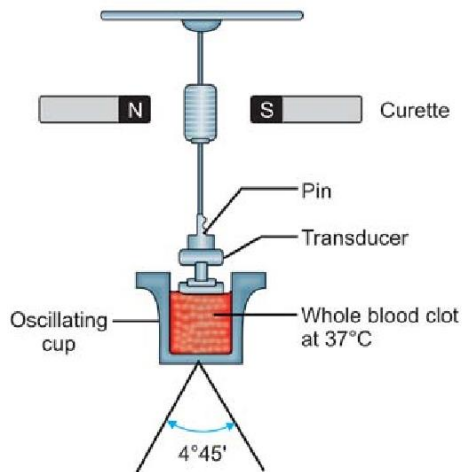
Coagulation Factors



Fibrin Meshwork



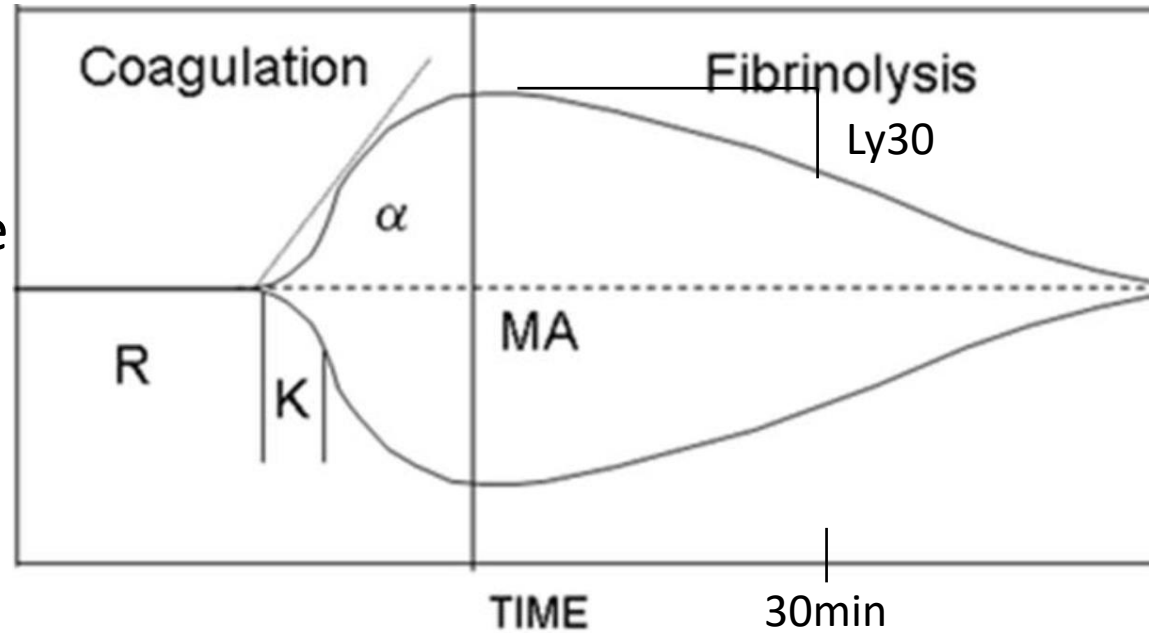
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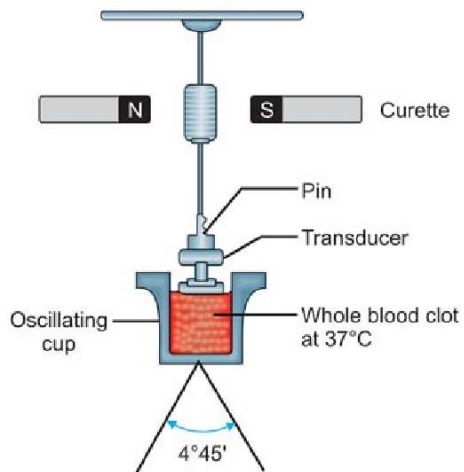
Coagulation Factors



Fibrin Meshwork



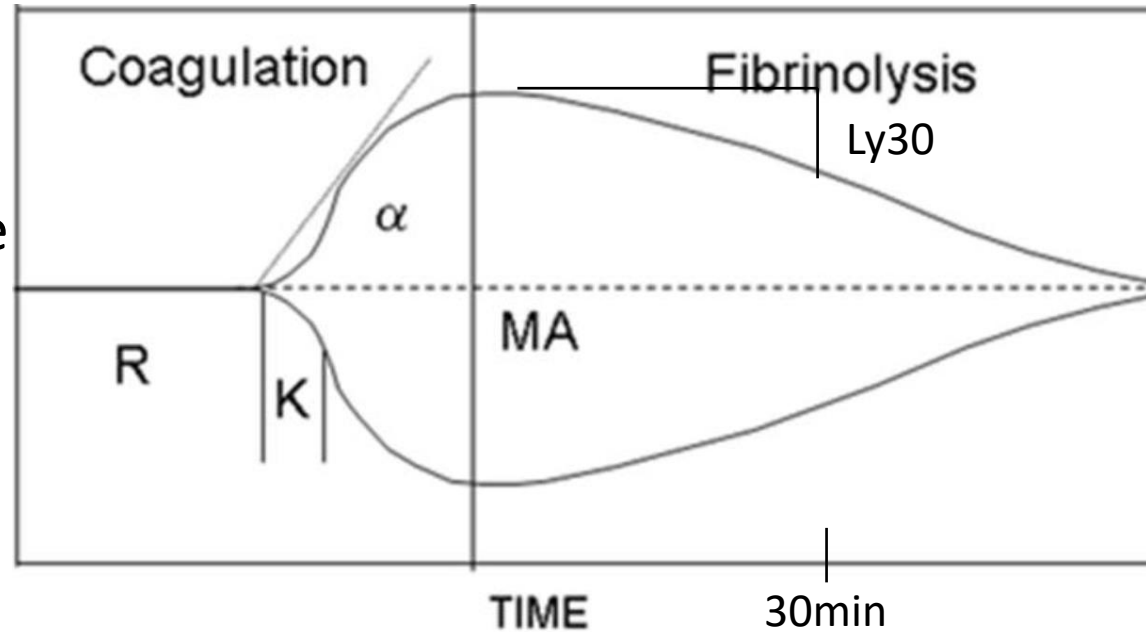
Platelets



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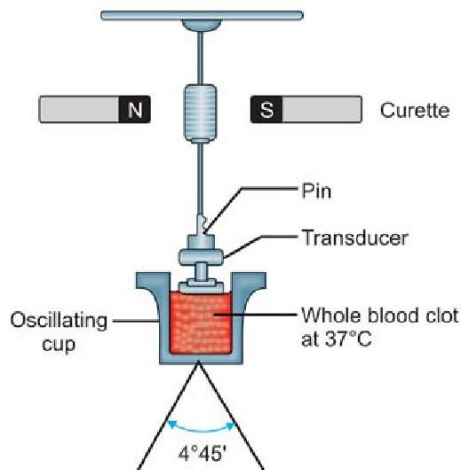
Coagulation Factors



Fibrin Meshwork



Platelets

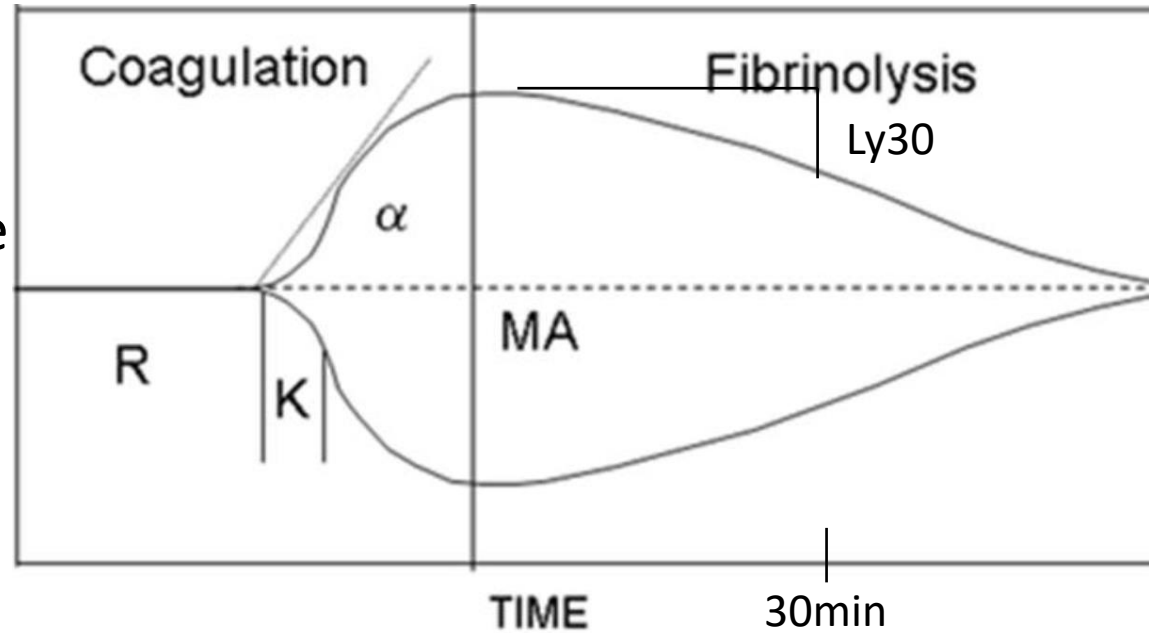


R Time	Time to start forming clot
K Time	Time until clot reaches a fixed strength
Alpha angle	Speed of fibrin accumulation
Maximum Amplitude (MA)	Highest vertical amplitude of the TEG
Lysis at 30 Minutes (LY30)	Percentage of amplitude reduction 30 minutes after maximum amplitude

Thromboelastography (TEG)

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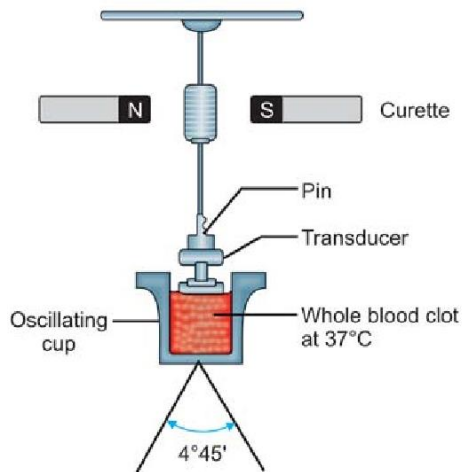
Coagulation Factors



Fibrin Meshwork



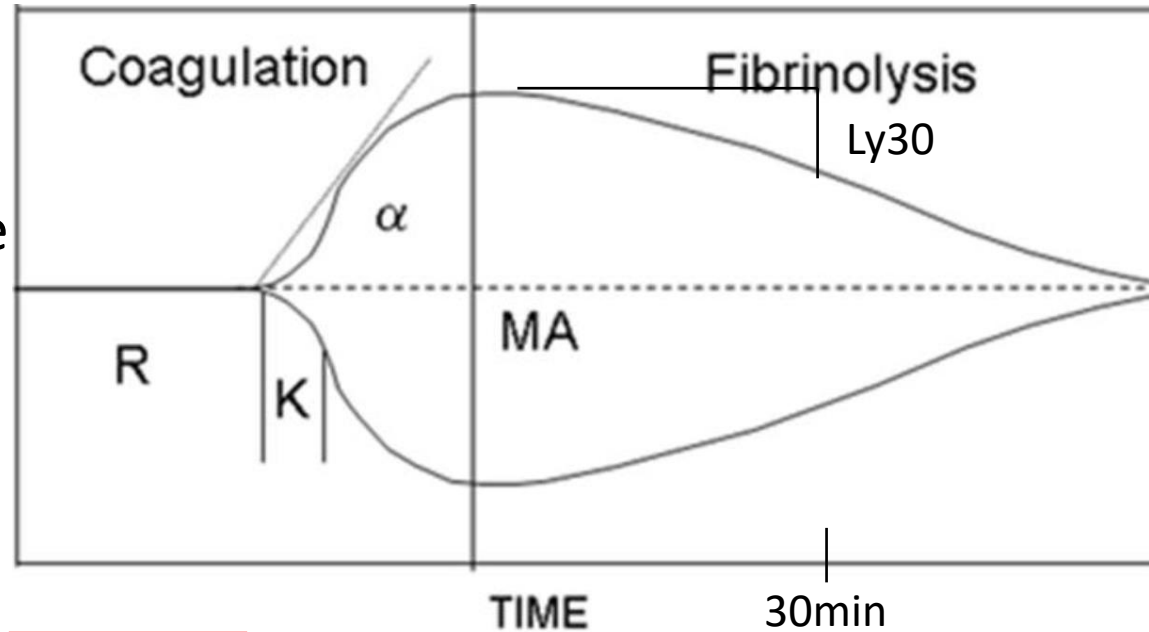
Platelets



Thromboelastography (TEG)

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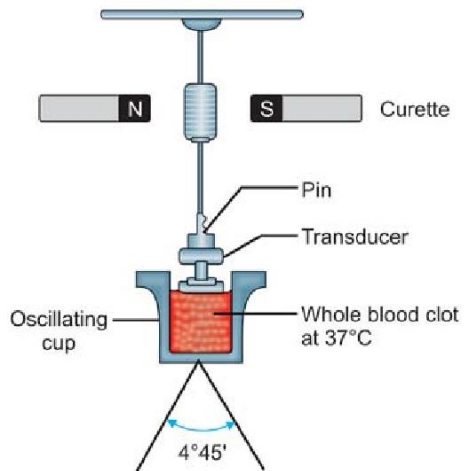
Coagulation Factors



Fibrin Meshwork



Platelets



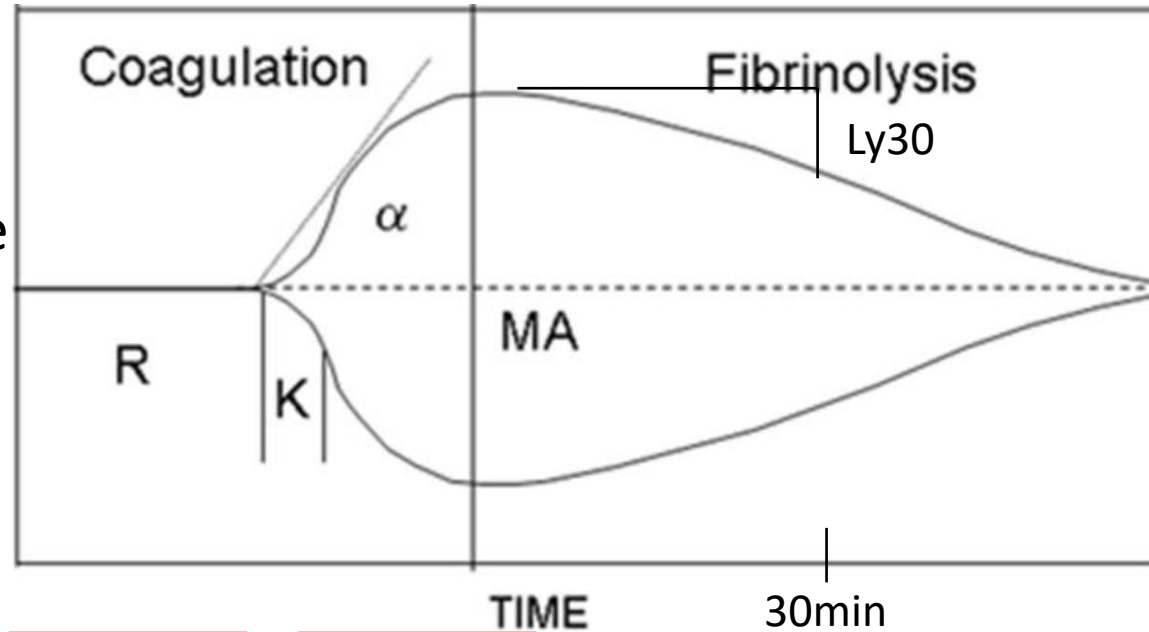
R Time
>55sec

2uFFP

Thromboelastography (TEG)

Traditional "Measures" of Coagulation

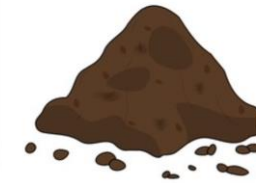
- PT/INR } Plasma
- PTT } Plasma
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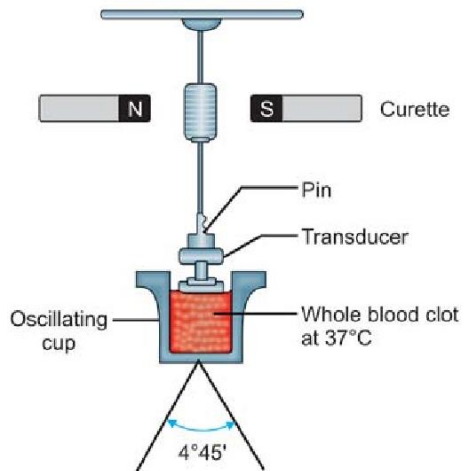
Coagulation Factors



Fibrin Meshwork



Platelets



R Time
>55sec

2uFFP

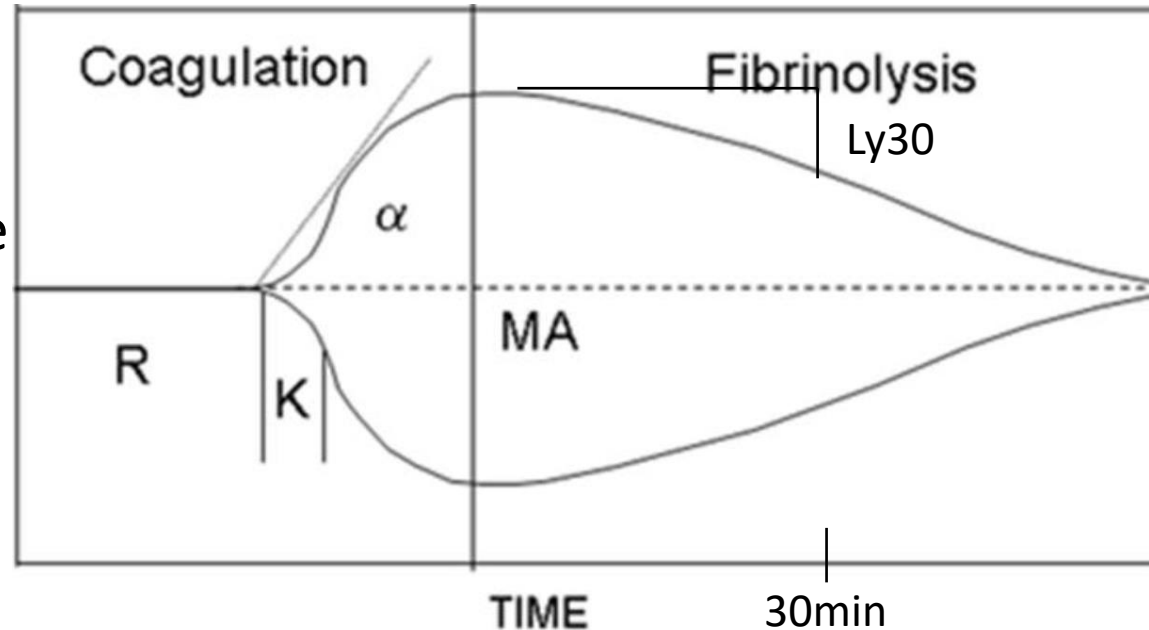
Angle
<65

Cryo 10u

Thromboelastography (TEG)

Traditional "Measures" of Coagulation

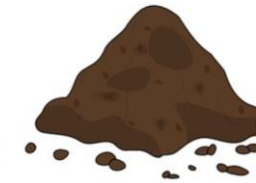
- PT/INR } Plasma
- PTT } Plasma
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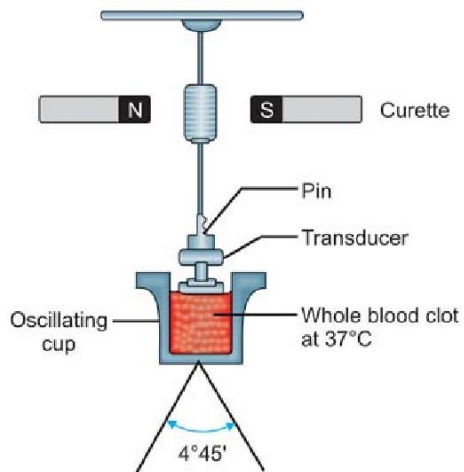
Coagulation Factors



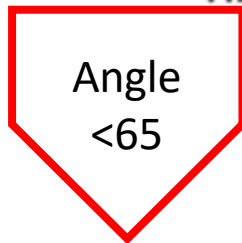
Fibrin Meshwork



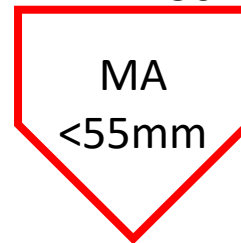
Platelets



2uFFP



Cryo 10u

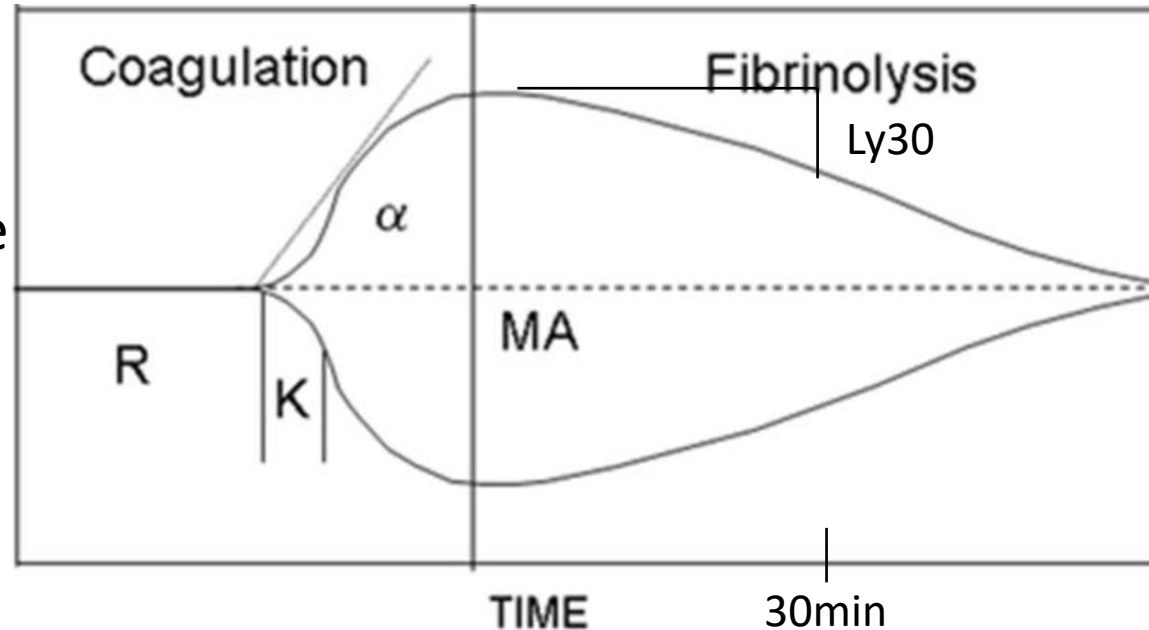


Platelets 6
pack

Thromboelastography (TEG)

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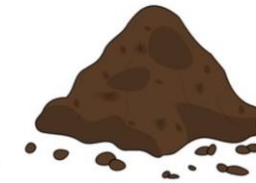
- PT/INR } Plasma
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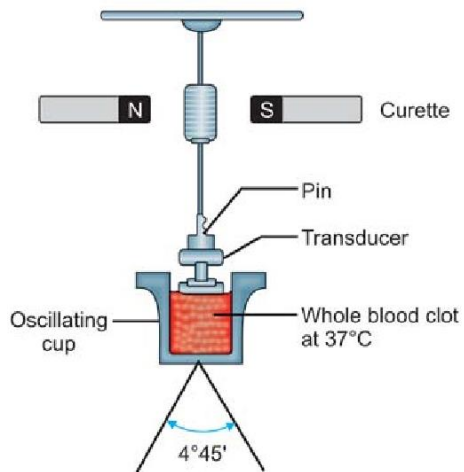
Coagulation Factors



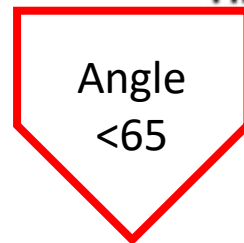
Fibrin Meshwork



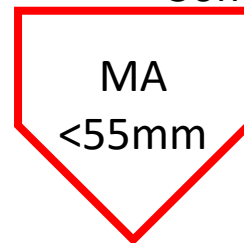
Platelets



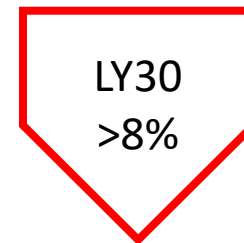
2uFFP



Cryo 10u



Platelets 6 pack



TXA 1g

Objectives

- Demystify TEG with a simple analogy
- Describe component administration in TEG-guided resuscitation

