

Treatment Guide*#



TEG® Value	Hemostasis State	Common Treatment	Notes
R less than 4 min	Enzymatic hypercoagulability	Anticoagulant of choice	<p># Hypothermia: If the patient post op is hypothermic, we suggest placing one sample of the patient's blood in the TEG® cup at the patient's body temperature, and a second sample in a TEG® cup set at a temperature of 37°C. The difference in patient hemostasis would be attributed to the effects of hypothermia. If the hypothermic patient is bleeding but his hemostasis in the 37°C sample is normal, this is an indicator that, as the patient warms up, his bleeding may stop. On the other hand, if the 37°C sample shows coagulopathy and the patient is bleeding, then the coagulopathy can be treated until the 37°C sample is normalized, and then, if the hypothermic patient still continues to bleed, this can be attributed to the hypothermia.</p> <p>## DDAVP: MA values between 46-54 reflect slight platelet dysfunction. You can treat with DDAVP to enhance platelet effectiveness by increasing plasma levels of high multimeric von Willebrand's factor, factor VIII, and by other undefined mechanisms, or with one unit of platelets. Conversely, you may consider delaying or bypassing treatment, allowing time for the patient's own platelets to recover.</p> <p>If normal TEG® test results obtained and patient is bleeding:</p> <p>Rule out Von Willebrand's disease/acquired von Willebrand's factor (vWF) deficiency. The dot is fully functional, but cannot adhere to the damaged vascular site due to poor platelet-to-subendothelial bonding. Consider treating with DDAVP (to release vWF) or FFP/cryo (contains vWF).</p> <p>Rule out antiplatelet drugs using PlateletMapping™, which measures the effect of antiplatelet therapy.</p> <p>Mechanical bleeding. If vWF deficiency and antiplatelet drugs have been ruled out, consider surgical bleeding.</p> <p>Rewarming and MA: The MA value of the blood sample run at rewarming is typically lower by 5 to 7 mm, compared to the one post protamine. Consider this when using the decision tree during the rewarming stage of surgery.</p> <p>If patient not heparin treated, evaluate coagulopathy based on the plain sample, since it is recommended to run patient samples simulating in vivo conditions. Therefore, in the absence of heparin in the patient, assessment without heparinase is advised.</p>
R between 11 - 14 min	Low clotting factors	x 2 FFP or 8 ml/kg ^{7A,26}	
R greater than 14 min	Very low clotting factors	x 4 FFP or 16 ml/kg ^{15,26}	
MA between 46 - 54 mm	Low platelet function	.3 µg/kg DDAVP ^{27,##}	
MA between 41 - 45 mm	Very low platelet function	x 5 platelet units ^{4,26}	
MA at 40 mm or less	Extremely low platelet function	x 10 platelet units ^{5,26A,1}	
MA greater than 73 mm	Platelet hypercoagulability	Antiplatelet therapy	
R less than 4 min and MA greater than 73	Enzymatic and platelet hypercoagulability	Antiplatelet therapy and anticoagulant of choice ^{1,11,10,28}	
Angle less than 45°	Low fibrinogen level	.06 u/kg cryo ⁵	
LY30 at 7.5% or greater, CI less than 1.0	Primary fibrinolysis	Antifibrinolytic of choice ^{5,1}	
LY30 at 7.5% or greater, CI greater than 3.0	Secondary fibrinolysis	Anticoagulant of choice ^{5,115}	
LY30 less than 7.5%, CI greater than 3.0	Prothrombotic state	Anticoagulant of choice ^{11,15}	

*Note: References for TEG® Decision Tree and Treatment Guide can be found at www.haemoscope.com/reference