

THE DOCTOR'S TROLLEY

April 2021













1. MISCELLANEOUS



<p>1 Insulin Syringe</p>		<p>8 Battery Size C x2</p>	
<p>2 1ml Syringe</p>		<p>9 Stitch Cutter Blade</p>	
<p>3 Wide Surgical Tape</p>		<p>10 Surgical Blade</p>	
<p>4 Narrow Surgical Tape</p>		<p>11 Scalpel</p>	
<p>5 Skin Staple Remover</p>		<p>12 Lubricating Jelly</p>	
<p>6 Bandage</p>		<p>13 Tourniquet</p>	
<p>7 2-0 Suture</p>			

2. CANNULAS & BUNGS



<p style="text-align: center;">1 Needle Free Valve</p>		<p style="text-align: center;">7 22G Venflon</p>	
<p style="text-align: center;">2 Adapter</p>		<p style="text-align: center;">8 20G Venflon</p>	
<p style="text-align: center;">3 Bung</p>		<p style="text-align: center;">9 18G Venflon</p>	
<p style="text-align: center;">4 Dual Cannula Extension Set</p>		<p style="text-align: center;">10 16G Venflon</p>	
<p style="text-align: center;">5 21G Butterfly Winged Needle</p>		<p style="text-align: center;">11 24G Venflon</p>	
<p style="text-align: center;">6 23G Butterfly Winged Needle</p>		<p style="text-align: center;">12 23G Butterfly Winged Needle with Adapter</p>	













3. BLOOD TUBES



<p>1 EDTA Tube</p>		<p>5 Blood Gas Tube</p>	
<p>2 Serum Gel Tube</p>		<p>6 Coagulation Tube</p>	
<p>3 Blood Transfusion EDTA Tube</p>		<p>7 Glucose Tube</p>	
<p>4 Li-Heparin Tube</p>			







4. SYRINGES & NEEDLES



<p style="text-align: center;">1 5ml Syringe</p>		<p style="text-align: center;">7 18G Needle without Filter</p>	
<p style="text-align: center;">2 10ml Syringe</p>		<p style="text-align: center;">8 2ml Syringe</p>	
<p style="text-align: center;">3 20ml Syringe</p>		<p style="text-align: center;">9 25G Needle</p>	
<p style="text-align: center;">4 60ml Syringe</p>		<p style="text-align: center;">10 23G Needle</p>	
<p style="text-align: center;">5 18G Needle with Filter</p>		<p style="text-align: center;">11 21G Needle</p>	
<p style="text-align: center;">6 19G Cannulae</p>		<p style="text-align: center;">12 19G Needle</p>	

5. STERILE PREPARATIONS



<p style="text-align: center;">1 Tegaderm IV</p>		<p style="text-align: center;">4 Gauze</p>	
<p style="text-align: center;">2 Alcohol Wipe</p>		<p style="text-align: center;">5 ChlorPrep 1.5ml</p>	
<p style="text-align: center;">3 Alcohol + Chlorhexidine Wipe</p>		<p style="text-align: center;">6 ChlorPrep 3ml</p>	

6. STERILE PROBE COVER KIT



1
**Arterial
Blood
Collection
Syringe**







2
**Sterile
Probe
Cover
Kit**



7. INVASIVE LINES



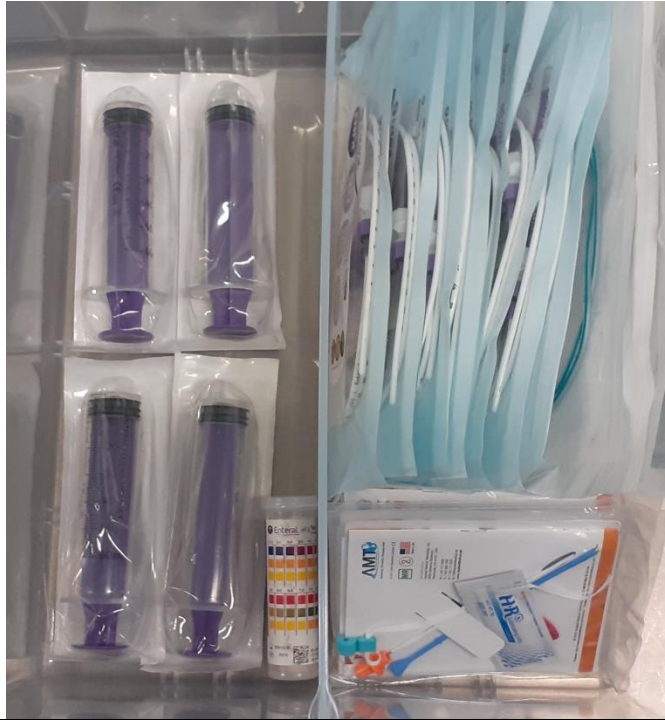
<p>1 Arterial Catheter 10cm X5</p>		<p>3 Quad Lumen CVC X5</p>	
<p>2 Arterial Catheter 8cm X5</p>		<p>4 3 Way Stopcock</p>	














8. LUMBAR PUNCTURE



<p>1 NRFit Spinal Needle 22G 90mm X10</p>		<p>4 NRFit Spinal Manometer X5</p>	
<p>2 NRFit Spinal Needle 22G 120mm X5</p>		<p>5 CSF Sample Bottles (5/set) X20</p>	
<p>3 Chlorhexidine Solution</p>			

9. NASOGASTRIC TUBES



1 Enteral Syringe		6 Ryles Tube Size 10		
2 Enteral Nasogastric Tube X5		7 Ryles Tube Size 12		
3 NG Tube Bridge X5		8 Ryles Tube Size 14		
4 Enteral pH Kit		9 Ryles Tube Size 16		
5 Magills Forceps				

10. SURGICAL GOWNS & HATS



1
Surgical Gowns
X5



2
Hat



11. WOUND DRESSING & SUTURE PACKS



<p>1 Standard Suture Pack X2</p>		<p>3 Woundcare Dressing Pack X5</p>	
<p>2 Standard Minor Op Pack X1</p>			

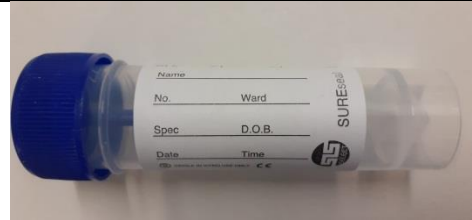
12. CULTURES



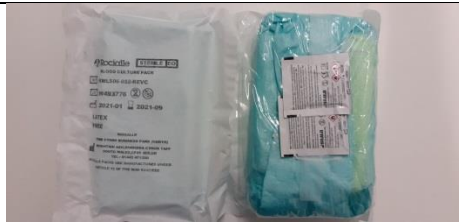
1
**Aerobic &
 Anaerobic
 Culture
 Bottles
 (2/set)
 X5**



3
**Stool
 Sample
 Bottle**



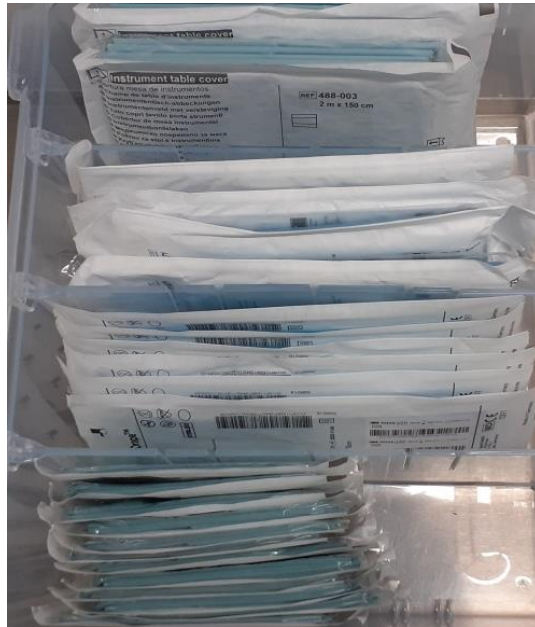
2
**Culture
 Pack
 X5**



4
**Urinalysis
 &
 Sample
 Bottle**



13. STERILE DRAPES



<p>1 Sterile Table Cover X2</p>		<p>3 Medium Surgical Drape X5</p>	
<p>2 Large Surgical Drape X3</p>		<p>4 Fenestrated Drape X5</p>	

14. MAJOR HAEMORRHAGE EMERGENCY KIT



Safeguard Pressure Assisted Device



Safeguard Syringe



Safeguard Guidelines

SAFEGUARD[®]

24cm PRESSURE ASSISTED DEVICE

INSTRUCTIONS FOR USE

Read instructions prior to use.
Product not made with natural rubber latex.

DEVICE DESCRIPTION

The SAFEGUARD 24 cm is a single use disposable device. SAFEGUARD has a clear medical grade polyurethane window and bladder, a clear medical grade PVC flexible fill tube, and a pressure sensitive, self-adhesive peel backing. A luer valve on the end of the fill tube enables a syringe to be connected to inflate the central bladder with air to provide pressure to the puncture site. The SAFEGUARD pressure assisted device has a sterile dressing with a clear window that facilitates visibility of the access site without removal or manipulation of the device.

INDICATIONS

The indications for use for the SAFEGUARD 24 cm pressure assisted device are to assist in obtaining and maintaining hemostasis. The device is also indicated in the reduction of active compression time in femoral artery cannulation following diagnostic and interventional procedures.

CONTRAINDICATIONS

The adhesive portion of the SAFEGUARD device should not be used over excoriated skin.

CAUTIONS

Rx Only. Caution: Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.

CAUTION: With over-inflation i.e., above 40 mLs of air, the bulb may begin to expand radially and could compromise the adhesive properties of the device.

CAUTION: Under-inflation of device could compromise the ability of the device to assist in obtaining and maintaining hemostasis.

REUSE PRECAUTION STATEMENT

For single patient use only. Do not reuse, reprocess or resterilize. Reuse, reprocessing or resterilization may compromise the structural integrity of the device and/or lead to device failure which, in turn, may result in patient injury, illness or death. Reuse, reprocessing or resterilization may also create a risk of contamination of the device and/or cause patient infection or cross-infection, including, but not limited to, the transmission of infectious disease(s) from one patient to another. Contamination of the device may lead to injury, illness or death of the patient.

PRECAUTIONS

- Use proper aseptic techniques while handling product.
- Do not use if package is damaged
- Inspect device prior to use to verify that no damage has occurred during shipping.

POTENTIAL ADVERSE EFFECTS

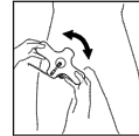
Possible adverse effects that may result from the use of this device:

- Hematoma
- Local bleeding
- Arterio-venous fistula or pseudoaneurysm

PRE-HEMOSTASIS, or MANUAL ASSIST TECHNIQUE (MAT)

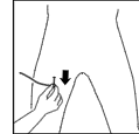
PLACEMENT OF SAFEGUARD

1. Before adhering SAFEGUARD to the patient, be sure skin is clean and dry. Determine the appropriate angle for SAFEGUARD placement to provide easy access to luer inflate/deflate port and to allow for easy sheath removal.

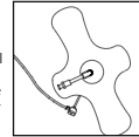


Note: Placement may require adjustment based on the patient's anatomy, angle of the puncture site, and the presence or absence of a procedural sheath.

2. Consider the point of maximum pulse, anatomy, angle of puncture and direction of flow to determine the appropriate SAFEGUARD position and verify.

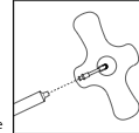


3. Pull the procedural sheath back approximately 1" (2.5 cm) so that when SAFEGUARD is adhered to the skin the sheath hub is outside the area of the SAFEGUARD adhesive.

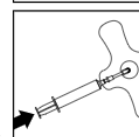


Note: It is recommended that you aspirate the sheath prior to removal to prevent distal embolization from residual clot in sheath.

4. Remove the adhesive backing and place the bulb where you would position your fingers to hold manual compression (for example, in femoral artery procedures, typically the point of maximum femoral pulse). Make sure SAFEGUARD is completely adhered to the skin.

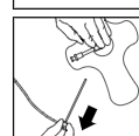


5. Attach and completely engage a standard luer lock syringe to inflate the desired volume a maximum volume of 40 mLs of air into the bulb to apply pressure on the arteriotomy site. Syringe must be completely engaged in the luer to inflate/deflate the bulb. Remove syringe.



Note: Maintain pressure on the plunger while detaching syringe from the SAFEGUARD valve. Observe that the desired pressure is achieved and maintained.

6. Remove sheath, then immediately apply manual compression directly over inflated bulb.

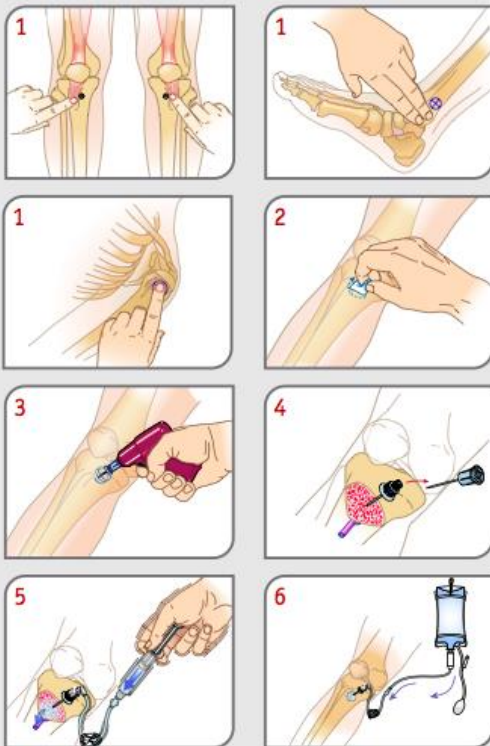


7. Hold manual compression until hemostasis has been achieved.*
 - Slowly release manual compression.
 - Check distal/proximal pulses to assure flow is maintained.
 - Confirm hemostasis by viewing the site through the inflated bulb window.

* Recommendations (MAT only):
Diagnostic patients - minimum 5 minutes
Interventional patients - minimum 10 minutes

8. Per hospital protocol, periodically check the site through the bulb window to confirm hemostasis and to manage the bulb volume and resultant pressure as needed. Continue to check distal/proximal blood flow to assure patency.
9. Deflate bulb every two hours to allow for capillary refill and to assess the site. Re-inflate the bulb if necessary.

INTRAOSSUEOUS (IO) ACCESS



To Insert Needle Set:

- Locate landmarks 1
- Clean site 2
- Insert EZ-IO® Needle Set 3
- Remove stylet from catheter 4
- Attach primed EZ-Connect®
- Consider IO 2% lidocaine without preservatives or epinephrine (cardiac lidocaine) for patients responsive to pain – prior to flush
- Medications intended to remain in the medullary space, such as a local anesthetic, must be administered very slowly until the desired anesthetic effect is achieved
- Syringe bolus (flush) IO with 10 ml normal saline..... 5
- Start infusion under pressure 6

A Medical Director or qualified prescriber must authorize appropriate dosage range.

Pressure Infusion Bag



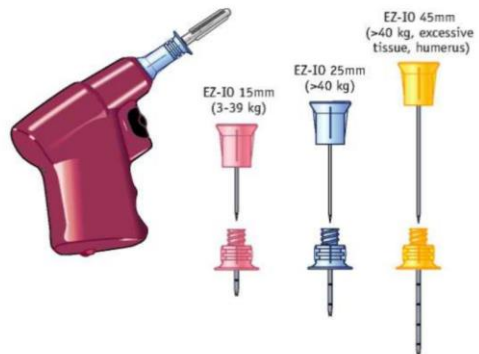
3 60ml Syringe



Components



EZ-IO Power Driver and Needle Sets: Description



GLOVES



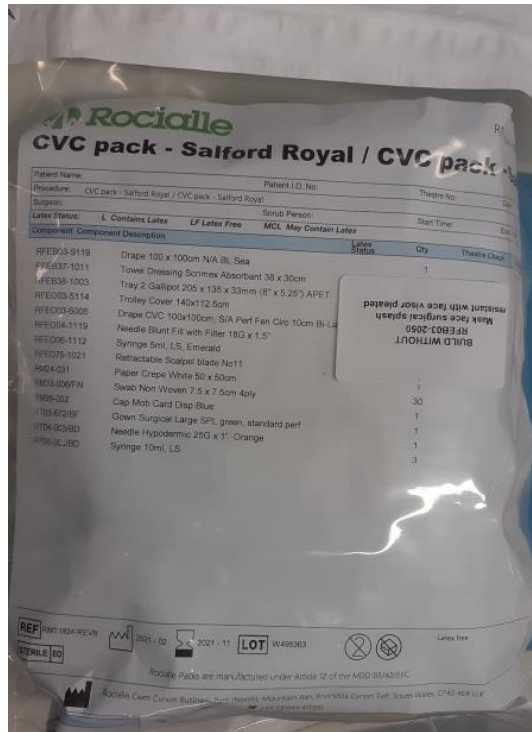
1
Tegaderm
(CVC)



2
Opsite
Flexigrid
(Arterial
Line)

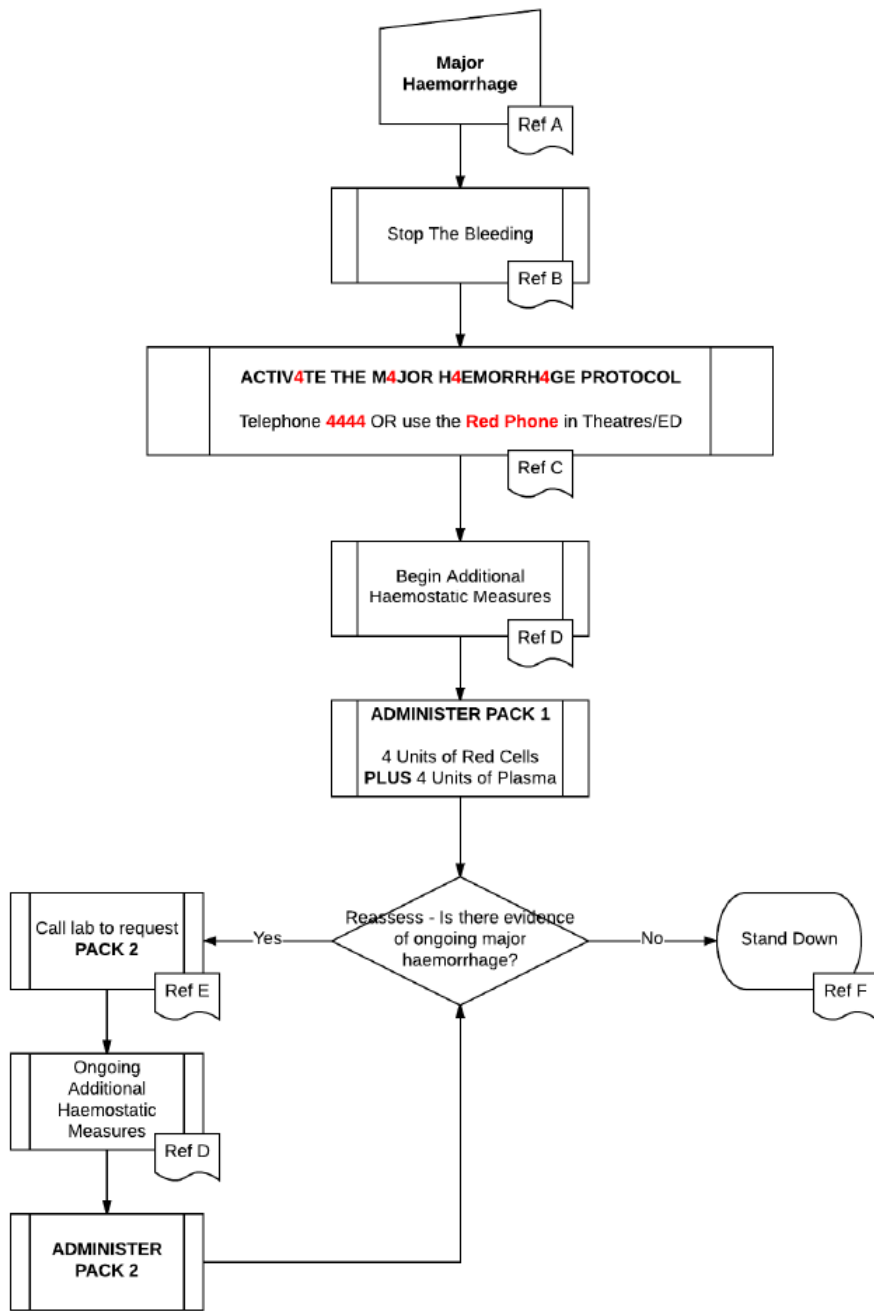


OTHERS



CVC Pack x5

Transfusion Management of Major Haemorrhage in Adults – Flowchart



Transfusion Management of Major Haemorrhage in Adults – Flowchart

Reference A : Major Haemorrhage

Defined as : Haemorrhage resulting in clinical shock OR blood loss of >50% of circulating volume within 3 hours OR blood loss of >150ml/minute

Reference B : Stop the bleeding

Get immediate control of any accessible bleeding points

Direct pressure tamponade, adrenaline soaked gauze and/or tourniquets depending on site.

Get the right people to the patient who can stop the bleeding

Urgently contact senior team and relevant specialists, such as general/specialist surgeons, gastroenterology, interventional radiology etc..

Get to the right environment

Strongly consider moving to a location where haemorrhage control can be optimised such as level 3 operating theatres or resuscitation.

Reference C : Activate the Major Haemorrhage Protocol

Dedicated Communication Lead to initiate and continue contact with Transfusion Lab :

- Tel. **4444** OR use the **Red Phone** (Theatres/ED)

State: **"I want to activate the Major Haemorrhage Protocol"**

Lab will require patient details, location, your name and the name of the responsible consultant

Enter patient's details (three identifiers) onto Transfusion Record Sheet (purple form) –

You **DO NOT** need to prescribe individual components at this stage

Send an appropriate member of staff with Transfusion Record Sheet to Transfusion Lab

Use emergency O negative blood products in relevant clinical areas (ED) whilst awaiting further products, but remember their use **does not** automatically activate the MHP

Reference D : Additional Haemostatic Measures

Avoid administering crystalloids whenever possible – hypotensive resuscitation can encourage haemostasis ("the first clot is the best clot")

Begin and continue measures to keep patient as warm as possible

Prepare warming infusion device where available and use this to deliver all products

Consider tranexamic acid 1g bolus and 1g infusion over 8 hours depending on clinical scenario

Urgently reverse any anticoagulation with [warfarin](#), [DOAC agents](#) or [heparin](#) where relevant

Send point-of-care coagulation test (TEG/INR) if available, VBG, clotting profile, and G&S x 2

If ionised Ca²⁺<1.0 mmol/L → Give 10ml of 10% calcium gluconate

If fibrinogen<1.5g/L → Call Transfusion Lab and request cryoprecipitate

Contact Consultant Haematologist via switchboard for expert advice as required

Call for cell salvage equipment and personnel if bleeding site amenable (Theatres/ED only)

Reference E : Call lab to request PACK 2

Dedicated Communication Lead to continue contact with Transfusion Lab :

- Tel. 4444 OR use the Red Phone (Theatres/ED)

State: **"I am requesting Pack 2 of the Major Haemorrhage Protocol for (patient's name)"**

Pack 2 = 4 units of Red Cells, 4 units of plasma, 1 ATD (Adult Therapeutic Dose) of Platelets

IF SPECIFIC NEED BASED ON TEG/BLOOD RESULTS IS KNOWN:

State: **"I am requesting (eg cryoprecipitate) for Major Haemorrhage Protocol for (patient)"**

Reference F : Stand Down Major Haemorrhage Protocol (MHP)

Dedicated Communication Lead to continue contact with Transfusion Lab and stand down MHP.

Initiate post MHP orderset (FBC/U&E/Bone profile/Clotting profile/VBG and TEG where available)

Ensure all documentation is completed in full

Return any unused blood products to Transfusion Lab as soon as possible

Emergency Vascular Quick Reference Guide

TO BE USED IN THE EVENT OF A MAJOR VASCULAR ACCIDENT IN THEATRE
OR EMERGENCY DEPARTMENT ONLY UNDER THE AUTHORITY OF THE
CONSULTANT IN CHARGE

**Activate Major Haemorrhage Protocol
Ring Blood Bank “4444 or red phone”
Give details as requested**



**Contact Manchester Royal Infirmary
0161 276 1234**
State: ‘This is Salford Royal Theatres (or Emergency Department),
we have a vascular emergency and need to speak to the
Vascular Consultant Surgeon on-call immediately’



Information to have ready
Name theatre & level where working
The type of procedure being performed
Surgeon performing surgery
How much blood loss
Don't forget to request ETA of Vascular Surgeon



Alert theatre coordinator to access cell salvage team

4. How to take a sample and run a TEG 6S Assay

TEG 6s is a cartridge based system which requires blood sampling at the patient bedside, transfer of the sample to the machine in theatres, pipetting of a small aliquot into the cartridge and processing of the assay. There is only a single machine for processing samples, which can be found in level 3 theatre recovery.

GHA cartridges require initial patient blood sampling in a sodium citrate **blue topped vacutainer tube**.

PLM cartridges require initial patient blood sampling in a separate lithium Heparin **green topped vacutainer tube**.

In cases of unexplained or severe bleeding, ensure a routine coagulation profile has been sent, then perform a GH assay first. Perform the Plateletmapping assay if the GHA is normal, but there is still concern over the possible presence of anti platelet agents - specifically aspirin and ADP receptor antagonists (eg. clopidogrel, ticagrelor).

To perform a TEG individually, you will need a login and access to the Machine obtainable [through the manufacturer](#). Otherwise, Operating Department Practitioners (ODPs) based in the theatre recovery are trained in the use of TEG and will assist as required

Performing a TEG assay:

1. Take a sample of the patient's blood and decant into a Vacutainer tube to the black marker line. At least 4.5ml is required for a blue top vacutainer, and 4ml for a green top vacutainer for the test to be accurate. (see Appendix 1) The sample in the Vacutainer tube is valid for 3.5 hours.
2. The Vacutainer tube is taken to the analyser (in Level 3 theatre recovery) where a sample of blood is transferred to the assay cartridge by pipette. The blood should reach the level of the arrow (see appendix 1).
3. Patient details are entered into the analyser and on screen instructions should be followed.
4. [Results will be available on the monitor in real time and via the TEG manager system](#) on the intranet @ <http://srhtteg.srht.nhs.uk/>



Blood transfusion & warmer machine – Ranger Blood/fluid warming system:

Location: Equipment store (next to Medical Physics Office)

Disposable sets next to pump

General Surgery Registrar on Call: 68126

Emergency ODP (for TEG): 61851