BIARGS
British & Irish Association of
Robotic Gynaecological Surgeons

Robotic emergencies: Standard Operating procedure

1) CPR

Role	Action
Surgeon	• Ensures the instruments jaws are open and straight in the operative field—ready for removal • Asks for the insufflation to be turned off • Gets ready to assist with chest compressions
First assistant	• Removes the robotic instruments and the camera from the patient • Moves the surgical arms with cannulas attached away to commence CPR
Scrub nurse	• Moves the surgical arms with cannulas attached away • Keeps the camera in a safe place • Prepares for instruments and swab count
Circulator 1	• Turns off the insufflation • Removes the cannula from the surgical arms and moves the robot away from the patient (this can be done quicker if the shift switches are set to N, cannula do not need to be detached)
Circulator 2	• Calls for help and dials emergency number • Open gown and gloves for surgeons
Anaesthetist	• Leads the CPR
Anaesthetist practitioner	• Supports anaesthetists • Emergency drugs • Defibrillator preparation

2) <u>Controlled Bleeding</u>

Role	Action
Surgeon	• Applies vascular clamps / bipolar instrument to grasp • Calls "**controlled undock**" • Press **Emergency stop button** prior to leaving the console • Dons sterile gown and gloves • Return to patient and convert to open • Ask for vascular set/vascular surgeon help
First assistant	• Delivers vascular clamps safely into the abdomen/maintains laparoscopic clamp on bleeding vessel while converting to open • Removes robotic instruments and detaches arms from cannula to move robot away except for instrument holding the injured blood vessel • When control of the vessel has been achieved, ask for the E**mergency release kit** • Removes robotic instrument
Scrub nurse	• Moves the surgical arms with cannulas attached away • Keeps the camera in a safe place • Makes sure open set and vascular clamps are available
Circulator 1	• Opens emergency instruments sets • Passes the emergency release kit • Moves robot away when asked
Circulator 2	• Open gown and gloves for surgeon • Calls for help
Anaesthetist	• Manages patient haemodynamically • Calls for help if patient crashing, set major haemorrhage protocol in place
Anaesthetist practitioner	• Supports Anaesthetist • Orders blood products as instructed

3) Uncontrolled Bleeding

Role	Action
Surgeon	• Calls "**controlled undock**" • Ensures the instruments jaws are open and straight in the operative field • Dons sterile gown and gloves • Return to patient and convert to open
First assistant	• Removes robotic instruments and cannula in one movement • Shouts "**clear**" • Commences/assists in opening patient
Scrub nurse	• Prepares instruments and swabs
Circulator 1	• Opens emergency instruments sets • Moves robot away when asked
Circulator 2	• Open gown and gloves for surgeon • Calls for help
Anaesthetist	• Manages patient haemodynamically • Calls for help if patient crashing, set major haemorrhage protocol in place
Anaesthetist practitioner	• Supports Anaesthetist • Orders blood products as instructed

4) **Instrument failure/Unrecoverable fault**

Role	Action
Surgeon	- If alarm hasn't been sounded, press the emergency stop button (red button) on the console. - Makes sure the instruments are clear of organs prior to removal with jaws open - If instruments are on vital structures, communicate that to the team, ask for the instrument release kit to release the instrument. - Once all instruments have been removed, initiate system shut down with robot docked
First assistant	- When asked to, makes sure the instruments are clear of organs with jaws open prior to removal - If instruments are on vital structures, communicate that to the team, ask for the instrument release kit to release the instrument.
Scrub nurse	- When asked to, makes sure the instruments are clear of organs prior to removal - If instruments are on vital structures, communicate that to the team, ask for the instrument release kit to release the instrument.
Circulating	None
Anaesthetist	None
Anaesthetist practitioner	None