

# Maximum surgical blood ordering schedule (MSBOS)

Updated April 2018

These are guidelines for ordering blood pre-operatively for all operations.

Please state the planned date and type of surgery on the request form.

If the lab has received a valid Group & Save sample within the last 5 days (or less if patient recently transfused – please contact lab for advice) and the antibody screen is negative, group confirmed blood can be made available within 15-20 minutes by the lab (this does not include transport time).

Operations	1 <sup>st</sup> Group & Save	EITHER 2 <sup>nd</sup> G&S	OR 2 Units XMatch	Special requirements	Cell salvage
	POAC	On admission / immediately preop			
<b>General surgery</b>					
Laparotomy / Laparoscopic <ul style="list-style-type: none"> <li>Anterior resection</li> <li>AP resection</li> <li>Total colectomy</li> <li>Hemi colectomy</li> </ul>	Yes	Yes		Request 1 unit if Hb <100 g/dl	Consider
Gastrectomy partial	Yes	Yes			Consider
Gastrectomy total	Yes		Yes		Consider
Splenectomy	Yes	Yes			Consider
Cholecystectomy Exploration CBD: Open	Yes	Yes			Consider
Cholecystectomy Exploration CBD: Laparoscopic	Yes				
Other Laparoscopic gastrointestinal surgery e.g. Nissen's / gastric banding	Yes				
Lymph Node Dissection: see under Plastics	Yes	Yes			
<b>Obstetric and gynaecological surgery</b>					
All Hysterectomies	Yes	Yes			Consider in open surgery
Placenta Praevias	Yes			XM 4 units	Consider

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	POAC	On admission / immediately preop			
<b>Orthopaedic surgery</b>					
Total knee replacement	Yes				Consider if no tourniquet
Revision total knee replacement	Yes		Yes		Consider if no tourniquet
Total hip replacement	Yes	Yes		Request 2 units if Hb <115 g/dl	Consider if Hb <115 g/dl
Revision total hip replacement	Yes		Yes		Consider
Total shoulder replacement	Yes	Yes			
Pelvic surgery e.g. periacetabular osteotomy	Yes		Yes		Consider
<b>Plastic surgery</b>					
<b>N.B. No routine cross-match required for any plastic surgery cases</b>					
Sarcoma Resection if operation time > 3 hours or a free flap is scheduled	Yes	Yes			
Bilateral DIEP breast reconstruction (not needed if unilateral)	Yes	Yes			
All lower limb free flaps	Yes	Yes			
All neck dissections	Yes	Yes			
All lymph node dissections: Neck Parotidectomy Axilla Groin/inguinal Pelvic/Iliac Ilioinguinal (groin and pelvis)	Yes	Yes			
<b>Spinal/neurosurgery</b>					
<b>Please note that these are illustrative categories and procedures. Certain major procedures (e.g. combined anterior and posterior procedures for vascular spinal metastases) have a predictably high blood loss and the Consultant Surgeon and Anaesthetist should be consulted regarding transfusion requirements</b>					
Complex Craniotomy • Trauma • Meningioma • Major skull base tumours • AVMS • Aneurysms	Yes		Yes		Consider
Spinal • Decompression, simple single level fusion	Yes	Yes			Consider if multi-level

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<b>Spinal/neurosurgery continued</b>					
Please see above					
Spinal <ul style="list-style-type: none"> <li>Stabilisation, including multi-level fusion / revision surgery e.g. for tumour, trauma, deformity/ scoliosis</li> </ul>	Yes		Yes		Consider
Non-complex craniotomy	Yes				
Intrinsic tumour	Yes				
Acoustic neuroma resection,	Yes				
Lobectomy	Yes				
Vagal Nerve Stimulator (VNS)	Yes	Yes			
Microvascular decompression,	Yes				
Transphenoidal surgery	Yes				
<b>Transplant surgery</b>					
Renal transplant	Yes	Yes		Request 1 unit if Hb <80 g/dl	Consider if Hb <115 g/dl
Excision of rejected T kidney	Yes	Yes			
Live kidney donor	Yes	Yes			
<b>Urological surgery</b>					
For major urological surgery, transfusion requirements are higher if patient has had previous radiotherapy.					
Nephrectomy <ul style="list-style-type: none"> <li>Simple</li> <li>Partial</li> </ul>	Yes	Yes			Consider
Nephrectomy radical	Yes		Yes		Consider
Nephrectomy laparoscopic	Yes	Yes			
Renal cryoablation	Yes	Yes			
Prostatectomy <ul style="list-style-type: none"> <li>Radical</li> <li>Retro pubic</li> <li>TURP</li> </ul>	Yes	Yes			
Cystectomy <ul style="list-style-type: none"> <li>Radical</li> <li>Cystourethrectomy</li> </ul>	Yes		Yes		Consider
Retroperitoneal dissection	Yes		Yes		Consider

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<b>Urological surgery: continued</b>					
Pyeloplasty open	Yes	Yes			
Laparoscopic cases major	Yes	Yes			
Adrenalectomy	Yes	Yes			
Ureteric reimplantation	Yes	Yes			
Bladder / Pelvic reconstructive surgery e.g Mitrofanoff, cystoplasty	Yes	Yes			
Urethroplasty	Yes	Yes			
TURBT	Yes	Yes			
Percutaneous nephrolithotomy (PCNL)	Yes				
<b>Vascular surgery</b>					
Abdominal aortic aneurysm repair	Yes		Yes		Consider
Vascular reconstruction proximal e.g. aorto.....	Yes		Yes		Consider
Vascular reconstruction distal e.g. femoral, ileo.....	Yes	Yes			
Vascular reconstruction axillobifemoral	Yes		Yes		Consider
Endarterectomy - aortic	Yes		Yes		Consider
Endarterectomy distal, femoral carotid	Yes	Yes			
Amputation	Yes	Yes			
Revision of stump	Yes	Yes			
EVAR/FEVAR	Yes	Yes			
<b>Breast surgery</b>					
Mastectomy	Yes				
Complex breast surgery / Bilateral mastectomy	Yes	Yes			
<b>Interventional radiology, not included elsewhere</b>					
NB: Often emergency admission and therefore G&S done on admission rather than in POAC					
Vertebroplasty	Yes				
ERCPC	Yes				
Cerebral aneurysm coiling	Yes				