

SURGICAL BLOOD ORDER SCHEDULE

Cardiac Surgery

Case Category	Rec
Heart or lung transplant	T/C 4U
Minimally invasive valve	T/C 4U
Revision sternotomy	T/C 4U
CABG/valve	T/C 4U
Open heart surgery	T/C 4U
Assist device	T/C 4U
Cardiac/major vascular	T/C 4U
Open ventricle	T/C 4U
CABG	T/C 2U
Cardiac wound surgery	T/C 2U
Percutaneous cardiac	T/C 2U
Pericardium	T/C 2U
Lead extraction	T/C 2U
AICD/pacemaker placement	T/S

General Surgery

Case Category	Rec
AP resection	T/C 2U
Intraabdominal GI	T/C 2U
Whipple or pancreatic	T/C 2U
Liver resection	T/C 2U
Retroperitoneal	T/C 2U
Substernal	T/C 2U
Bone marrow harvest	T/S
Hernia – Ventral/Incisional	T/S
Hernia – Inguinal/Umbilical	No Sample
Appendectomy	No Sample
Abdomen/chest/soft tissue	No Sample
Lap or open cholecystectomy	No Sample
Thyroid/parathyroid	No Sample
Central venous access	No Sample
Any Breast – except w/flaps	No Sample

Gynecological Surgery

Case Category	Rec
Uterus open	T/C 2U
Open pelvic	T/C 2U
Uterus/ovary	T/S
Total vaginal hysterectomy	T/S
Cystectomy robotic assisted	T/S
Cystoscopy	No Sample
External genitalia	No Sample
GYN cervix	No Sample
Hysteroscopy	No Sample
Superficial wound	No Sample

Neurosurgery

Case Category	Rec
Thoracic/Lumbar/Sacral fusion	T/C 4U
Spine tumor	T/C 2U
Posterior cervical spine fusion	T/C 2U
Spine Incision and Drainage	T/C 2U
Intracranial tumor / aneurysm	T/C 2U
Laminectomy/discectomy	T/S
Spine hardware removal/biopsy	T/S
ACDF	T/S
Extracranial	No Sample
Nerve procedure	No Sample
CSF/shunt procedure	No Sample

Orthopedic Surgery

Case Category	Rec
Thoracic/Lumbar/Sacral fusion	T/C 4U
Pelvic orthopedic	T/C 4U
Open hip	T/C 2U
Femur open	T/C 2U
Above/below knee amputation	T/C 2U
Humerus open	T/S
Fasciotomy	T/S
Shoulder Incision & Drainage	T/S
Tibial/fibular	T/S
Total knee replacement	T/S
Shoulder open	T/S
Knee open	T/S
Thigh soft tissue	No Sample
Ortho external fixation	No Sample
Peripheral nerve/tendon	No Sample
Lower extremity I&D	No Sample
Hand orthopedic	No Sample
Upper extremity arthroscopy	No Sample
Upper extremity open	No Sample
Podiatry/Foot	No Sample
Hip closed/percutaneous	No Sample
Lower extremity arthroscopic	No Sample
Shoulder closed	No Sample
Tibial/fibular closed	No Sample

Otolaryngology Surgery

Case Category	Rec
Laryngectomy	T/C 2U
Facial reconstruction	T/C 2U
Cranial surgery	T/C 2U
Radical neck dissection	T/C 2U
Carotid body tumor	T/C 2U
Mandibular surgery	T/S
Neck dissection	T/S
Mastoidectomy	No Sample
Parotidectomy	No Sample
Facial plastic	No Sample
Oral surgery	No Sample
Sinus surgery	No Sample
Thyroid/parathyroidectomy	No Sample
Suspension laryngoscopy	No Sample
Bronchoscopy	No Sample
Cochlear implant	No Sample
EGD	No Sample
External ear	No Sample
Inner ear	No Sample
Tonsillectomy/adenoidectomy	No Sample
Tympanomastoid	No Sample

Thoracic Surgery

Case Category	Rec
Esophageal open	T/C 2U
Sternal procedure	T/C 2U
Chest wall	T/C 2U
Thoracotomy	T/C 2U
Pectus repair	T/C 2U
VATS	T/S
Mediastinoscopy	T/S
EGD/FOB	No Sample
Central venous access	No Sample

Urology

Case Category	Rec
Cystoprostatectomy	T/C 2U
Urology open	T/C 2U
Nephrectomy	T/C 2U
Lap/Robotic kidney/adrenal	T/S
RRP	T/S
Percutaneous nephrolithotomy	T/S
Robotic RRP	No Sample
External genitalia/Penile	No Sample
TURP	No Sample
Cysto/ureter/urethra	No Sample
TURBT	No Sample

Vascular/Transplant Surgery

Case Category	Rec
Liver transplant	T/C 15U
Thoracoabdominal aortic	T/C 15U
Major liver resection	T/C 4U
Major vascular	T/C 4U
Exploratory lap vascular	T/C 4U
Kidney pancreas transplant	T/C 2U
Major endovascular	T/C 2U
Above/below knee amputation	T/C 2U
Nephrectomy/kidney transplant	T/C 2U
Organ procurement	T/C 2U
Peripheral vascular	T/C 2U
Vascular wound I&D	T/C 2U
Carotid vascular	T/S
AV fistula	T/S
Peripheral endovascular	T/S
Angio/Arteriogram	No Sample
Peripheral wound I&D	No Sample
1st rib resection/thoracic outlet	No Sample
Superficial or skin	No Sample
Foot/toe amputation/debride	No Sample
Central venous access	No Sample

If the procedure you are looking for is not on this list, then choose the procedure that most closely resembles that procedure.

***Emergency Release blood is available for ALL cases, and carries a risk of minor transfusion reaction of 1 in 1,000 cases.**

Supplemental Digital Content 1. The surgical blood order schedule that has been implemented at Johns Hopkins Hospital. These recommended preoperative blood orders are specific to our institution. ACDF = Anterior cervical discectomy/fusion, AICD = Automated implantable cardiac defibrillator, AP = Anterior-posterior, AV = Arterial-venous, CABG = Coronary artery bypass grafting, CSF = Cerebral-spinal fluid, EGD = Esophagogastroduodenoscopy, FOB = Fiberoptic bronchoscopy, GI = Gastrointestinal, GYN = Gynecological, I & D = Incision and drainage, Lap = Laparoscopic, No sample = No type and screen or type and crossmatch needed, Rec = Recommendation, RRP = Radical retropubic prostatectomy, T/C = Type and crossmatch, T/S = Type and screen, TURBT = Transurethral bladder tumor, TURP = Transurethral prostatectomy, U = Units of erythrocytes, VATS = Video-assisted thoracoscopic surgery