

Notes

Abnormal ECG: LBBB, LVH with strain (anterolateral ST depression +/- T inversion) or pathological Q waves are predictive of LVSD.

If there has been no change in 12-lead ECG since the last echo, a clinically relevant change in LV function is very unlikely.

Newly detected AF: preoperative echo is not routinely indicated, if there are no symptoms or signs of heart failure

Biomarkers: Hs-cTnI or NT-proBNP can be measured in high-risk cases to stratify the risk of perioperative death and CV complications

Valves: Echo surveillance interval depends on severity of valve disease on last echo – at discretion of cardiology/echo department

Simple Congenital¹: e.g. surgically repaired ASD or VSD with normal post op echo

Complex congenital²: More complex congenital cardiac pathology such as Tetralogy of Fallot or Transposition of the great arteries.

Suggest discussion with Cardiologist in this patient group if Consultant Anaesthetist has concerns.

Table of Surgical Procedures and Risk Categorisation

Table 3 Surgical risk estimate according to type of surgery or intervention^{a,b}

Low-risk: < 1%	Intermediate-risk: 1–5%	High-risk: > 5%
<ul style="list-style-type: none"> • Superficial surgery • Breast • Dental • Endocrine: thyroid • Eye • Reconstructive • Carotid asymptomatic (CEA or CAS) • Gynaecology: minor • Orthopaedic: minor (meniscectomy) • Urological: minor (transurethral resection of the prostate) 	<ul style="list-style-type: none"> • Intraperitoneal: splenectomy, hiatal hernia repair, cholecystectomy • Carotid symptomatic (CEA or CAS) • Peripheral arterial angioplasty • Endovascular aneurysm repair • Head and neck surgery • Neurological or orthopaedic: major (hip and spine surgery) • Urological or gynaecological: major • Renal transplant • Intra-thoracic: non-major 	<ul style="list-style-type: none"> • Aortic and major vascular surgery • Open lower limb revascularization or amputation or thromboembolism • Duodeno-pancreatic surgery • Liver resection, bile duct surgery • Oesophagectomy • Repair of perforated bowel • Adrenal resection • Total cystectomy • Pneumonectomy • Pulmonary or liver transplant

CAS = carotid artery stenting; CEA = carotid endarterectomy.

^aSurgical risk estimate is a broad approximation of 30-day risk of cardiovascular death and myocardial infarction that takes into account only the specific surgical intervention, without considering the patient's comorbidities.

^bAdapted from Glance et al.¹¹

*Sourced from ESC/ESA Guidelines on non-cardiac Surgery: cardiovascular assessment and management