



Supplement Post-operative complications grading systems

Table S1. Memorial Sloan Kettering Cancer Center Surgical Secondary Events Grading System, used by Accorsi et al. [24].

Grade 0	No complications
Grade I	Bedside care or oral medications
Grade II	Intravenous medications, transfusion
Grade III	Radiologic, endoscopic or operative intervention required
Grade IV	Chronic disability or organ resection
Grade V	Death

Table S2. Accordion Severity Classification, used by Casarin et al. [37,38].

Grade 0	No complications Complications carrying minor risks. At most requires bedside procedure.
Grade I	Allowed therapeutic regimens are: antiemetics, antipyretics, analgesics, diuretics, electrolytes, and physiotherapy. Hospital stay required for treatment of complication does not exceed twice the median length of stay for the procedure
Grade II	Potentially life threatening Requiring pharmacological treatment with drugs other than such allowed for grade 1 complications. Blood transfusions and total parenteral nutrition are also included. Any patient with a complication and hospital stay exceeding twice the median length of stay for the procedure and not falling into a higher category
Grade IIa	
Grade IIb	Requiring invasive procedures: surgical, endoscopic or radiological (invasive) intervention
Grade III	Complications with residual or lasting disability. Examples are stroke, organ and limb loss
Grade IV	Death in a patient with a complication

Table S3. Clavien Dindo Classification, used by Geppert *et al.*, Imboden et al. and Polan et al. [35,39–41].

Grade 0	No complications Any deviation from the normal post-operative course without the need for pharmacological treatment or surgical, endoscopic and radiological interventions. Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgesics, diuretics and electrolytes and physiotherapy. This grade also includes wound infections opened at the bedside
Grade I	
Grade II	Requiring pharmacological treatment with drugs other than such allowed for grade I complications. Blood transfusions and total parenteral nutrition are also included
Grade III	Requiring surgical, endoscopic or radiological intervention
Grade IIIa	Intervention not under general anesthesia
Grade IIIb	Intervention under general anesthesia
Grade IV	Life-threatening complication (including CNS complications)* requiring IC/ICU-management
Grade IVa	Single organ dysfunction (including dialysis)
Grade IVb	Multiorgan dysfunction
Grade V	Death of a patient

*brain hemorrhage, ischemic stroke, subarachnoid bleeding, but excluding transient ischemic attacks; IC intermediate care; ICU intensive care unit.