The PICO® 7 patient: identifying patients at high risk of wound complications

The risk of developing a post-operative wound infection depends on the type of surgery and patient risk factors[1]

The presence of just 1 major risk factor or 2 or more moderate risk factors, places patients at high risk of surgical site complication and means you should consider PICO 7.

Category	Patient-related	Procedure-related
Major risk factors Presence of 1 = high risk of surgical site complication	○ BMI ≥40kg/m² or ≤18kg/m² ○ Uncontrolled insulin dependent diabetes mellitus ○ Renal dialysis	○ Extended duration of surgery* ○ Emergency surgery ○ Hypothermia
Moderate risk factors Presence of ≥2 = high risk of surgical site complication	○ ASA Physical Status >II ○ Age <1 year or >75 years ○ BMI 30–39.9kg/m² ○ Diabetes mellitus ○ Chronic obstructive pulmonary disease ≥GOLD class 2 ○ Renal insufficiency/chronic kidney disease ○ Immunosuppression ○ Steroids for a chronic condition ○ Chemotherapy ○ Pre-existing infection at a body site remote from operative site ○ Serum albumin <2.5g/dl ○ Smoking (current)	○ Anaemia/blood transfusion ○ High wound tension after closure ○ Dual antiplatelet treatment ○ Suboptimal timing or omission of prophylactic antibiotics ○ Tissue trauma/large area of dissection/large area of undermining

Table adapted from World Union of Wound Healing societies Consensus, 2016[1]

The Consensus on the Management of Closed Surgical Incisions by the World Union of Wound Healing Societies[1] and World Health Organisation Guidelines[3] recommend the use of NPWT in patients who are at high risk for SSI

*Defined as >T (hours) which is dependent on the type of surgical procedure, and is the 75th centile of duration of surgery for a particular procedure, e.g. coronary artery bypass graft has a T of 5 hours and caesarean section has a T of 1 hour