

Table 1. *Estimation of physiologic ability and surgical stress (E-PASS) scoring system.*

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1.  $PRS = -0.0686 + 0.00345 X_1 + 0.323 X_2 + 0.205 X_3 + 0.153 X_4 + 0.148 X_5 + 0.0666 X_6$

$X_1$ : age;  $X_2$ : presence (1) or absence (0) of severe heart disease;  $X_3$ : presence (1) or absence (0) of severe pulmonary disease;  $X_4$ : presence (1) or absence (0) of diabetes mellitus;  $X_5$ : performance status index (0-4);  $X_6$ : American Society of Anesthesiologists physiological status classification (1-5).

Severe heart disease is defined as heart failure of New York Heart Association class III or IV, or severe arrhythmia requiring mechanical support. Severe pulmonary disease is defined as any condition with a % vital capacity (%VC) less than 60% and/or a forced expiratory volume in 1 s (FEV1.0%) less than 50%. Diabetes mellitus is defined according to the World Health Organization criteria. Performance status index is defined by the Japanese Society for Cancer Therapy.

2.  $SSS = -0.342 + 0.0139 X_1 + 0.0392 X_2 + 0.352 X_3$

$X_1$ : blood loss/body weight (g/kg);  $X_2$ : operation time (h);  $X_3$ : extent of skin incision (0, minor incision for laparoscopic or thoracoscopic surgery including scope-assisted surgery; 1, laparotomy or thoracotomy alone; 2, both laparotomy and thoracotomy).

3.  $CRS = -0.328 + 0.936 (PRS) + 0.976 (SSS)$

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Source: Haga *et al.* (10). PRS: Preoperative risk score; SSS: surgical stress score; CRS: comprehensive risk score.