Preoperative clinical patient parameters can be used to predict the risk of short-term mortality for colorectal cancer patient after surgical treatment.

The predicted risk can assist the multidisciplinary team conference deciding on slightly different approaches to the patient course to prevent mortality.

CLINICAL USE OF PREDICTION MODELS

The MDI conference is where the decision regarding the treatment plan is made. The short-term mortality model along with other models could be a valuable addition to the current patient information.

Patients with a high risk of short-term mortality should be reviewed in detail by their responsible doctor to identify, why the risk is higher:

- Do they have a bad performance status?
- Do they have severe anemia?
- Are they fragile, elderly citizens?
- Do they have severe comorbidity?

When the patient’s risk factors are identified, the best treatment plan should be planned accordingly.

The threshold for a “high” risk of short-term mortality is based on the predicted risk, the remaining CSS prediction models and an individual assessment of, however if a patient’s risk significantly exceeds the average risk of mortality for patients operated for colorectal cancer, it should be reviewed why.

POSITIVE VALUE COVARIATES IN LASSO REGRESSION (30 DAYS) – Top 7

- American Society of Anaesthesiology Score 4 (custom)
- Exploratory surgery as primary procedure
- Age group 100-104
- Age group 90-94
- Endoscopic insertion of permanent colonic stent
- Age group 85-89
- Emergency surgery

NEGATIVE VALUE COVARIATES IN LASSO REGRESSION (30 DAYS) – Top 7

- Age group 40-44
- Age group 50-54
- Age group 45-49
- Emergency procedure before final surgery
- Age group 55-59
- American Society of Anaesthesiology Score 1 (custom)
- Age Group 35-39

See full list of positive covariates →

See full list of negative covariates →