

PEER-REVIEW REPORT

Name of journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 88587

Title: Predictive modeling for postoperative delirium in elderly patients with abdominal malignancies using synthetic minority oversampling technique

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05242485

Position: Peer Reviewer

Academic degree: PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: United States

Author's Country/Territory: China

Manuscript submission date: 2023-10-01

Reviewer chosen by: Jia-Ru Fan

Reviewer accepted review: 2023-12-28 01:52

Reviewer performed review: 2023-12-30 01:47

Review time: 1 Day and 23 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Authors constructed a prediction model of postoperative delirium and verified it using SMOTE. There are like typos in some key statements, rendering the conclusions contradictory to the data presented. RESULTS of Abstract indicated that P1 outperformed P2. In Model Comparisons of RESULTS, however, it was said that "there was no significant difference in performance". Yet again in Research Results of ARTICLE HIGHLIGHTS, it was stated that the model based on SMOTE outperformed traditional methods. Minor comments: 1) "P2" was not defined in Abstract. 2) "ICD-10 coding classification" -> "ICD-10; maybe provide a reference to ICD-10? 3) "willing participation" -> "willing to participate"? 4) Define abbreviations ICU, BMI, and VAS. 5) Is this manuscript a research article or a review? If it's a research article, why does literature search appear in "Data Collection"? 6) "nebulization"->"nebulizer"? 7) "technological roadmap" -> "flowchart"? 8) For the definitions of P1 and P2, please indicate units when applicable, e.g., for "Surgery duration". 9) Why were the p values so large for the correlation (p=0.784 for P1 and p=0.990 for P2)? What test were those p values for? 10) "1/019"->"1.019"? 11) "index scores" -> "index" 12) "can further mitigate" ->

"may further mitigate"? 13) "the SMOTE oversampling (technique)" -> "SMOTE" 14) Ref.
[28] missing journal name 15) Figure 1: Define abbreviations SMOTE&ROC in the
caption 16) Figure 1: What is "Frequency of risk prediction models"?