



## Letter to Editor Regarding Article “Multidimensional Nomogram to Predict Postoperative Pancreatic Fistula After Minimally Invasive Pancreaticoduodenectomy”

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### DEAR EDITOR,

We have recently been interested and have discussed in depth the article entitled “Multidimensional Nomogram to Predict Postoperative Pancreatic Fistula after Minimally Invasive Pancreaticoduodenectomy.”<sup>1</sup> The authors retrospectively analyzed multidimensional, relevant, clinical characteristics of 429 postoperative MIPD patients and screened for high-risk factors by multiple regression and finally developed and constructed a multidimensional nomogram. We are very grateful for the research done by the author, but there are still some deficiencies that we need to discuss.

First, the authors’ inclusion of intraoperative blood transfusion ( $P = 0.011$ ) as a risk factor by regression analysis is open to debate. The possible bias of the statistical results of the included patients regarding intraoperative blood transfusion may have influenced the results of the regression analysis, and the presence or absence of intraoperative blood transfusion is dependent on the patient’s coagulability, anastomosis technology, and the level of surgical performance of the operator.<sup>2,3</sup> Furthermore, the authors performed a multidimensional approach to collect clinical characteristics, such as pancreatic duct size. According to relevant studies, ductal thickness/pancreatic thickness, visceral fat thickness, pancreatic density, etc., have important effects on the occurrence of CR-POPF. The authors should consider this aspect

to better reflect the concept of multidimensionality to construct the prediction model more rationally.<sup>4</sup>

Meanwhile, the authors did not perform external validation of the model in this article, which could reduce the credibility and clinical transferability of the model, and the authors should improve it.<sup>4</sup> The above comments are based on the results made by the authors to improve the prediction model more scientifically, rationally and logically, so that it can better guide the clinical treatment. Finally, we thank the authors again for their contribution. This study provides further reference for the development of a predictive model for pancreatic fistula after pancreatic surgery to better guide clinical management.

### REFERENCES

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