

Reviewer #1:

Comments1: But let me mention now, to increase the readability and the reach of this article, the authors should consider that others outside of oncology will not have such a knowledge of the wide array of acronyms used here; the over use of acronyms is unpleasant and unhelpful. So many times, I was completely lost as to what the authors were trying to communicate. During such times, it appeared that the knowledge was only being communicate to someone specifically in their field and not made available to other scientists like me.

Reply: Thank you for your valuable suggestions. It's inconsiderate to overuse acronyms for you who does not major in clinical oncology. To increase the readability and the reach of this article, we have deleted abbreviations that are less than 5 times in the paper, such as NADCs. We are no longer to use abbreviate words such as N(node), T(tumor). In addition, we have detailed descriptions of abbreviations such as TNM, CEA, etc. We are still sorry for the trouble that has caused you inconvenience.

Comments2: • Lines 44 and 45 – No idea what CES stands for means. What is higher N stage? What is TNM? This is completely lost in the abstract. Is this important to know?

Reply: Thank you for your valuable suggestions. CEA is the acronym of Carcinoembryonic Antigen, it is commonly used to represent carcinoembryonic antigen in clinical test reports. TNM is the acronym of Tumor Node Metastasis, we have explained CEA and TNM in the abstract, text and table. N stage means node stage that depends on the number of metastatic lymph nodes in the midgut. The more the metastatic lymph nodes, the higher the node stage. In this revised manuscript, we use “node” rather than “N”.

Comments3:• Lines 79 – Why use NADC? Don't introduce so many acronyms!!! There is plenty of room to state this each time. Otherwise, it really confuses the reading!!!!!!!

Reply: Thank you for your comment. We apologize for using so many acronyms that appear so infrequently in the text. We have eliminated the use of NADC.

Comments4:• Lines 114-115 – Why is it important to state no AI tools? Please explain for us who are not familiar with this.

Reply: Thank you for your comment. Some journals require authors not to use AI tools when preparing their manuscripts, so we explain this. In addition, we have replaced AI with artificial intelligence in manuscripts.

Comments5:• Line 117 – Is PSM a necessary acronym? Why not state it each time?

Reply: Thank you for your comment. PSM is the acronym of propensity score matching. Propensity score matching is abbreviated as PSM in most of studies ,so we have not canceled the use of PSM. If you think that using PSM will make reading the article more difficult, we will eliminate the use of PSM.

Comments6: • Lines 154-155 – “Fifteen patients were diagnosed with HIV before admission.”
What does this mean. Does this mean that the others who came in for CRC did not know they
were HIV positive? Wow! That is a shock!! So the CRC brought them into medical
care where then they were also diagnosed with HIV? Amazing. Please be more
specific about this in the description. This changes a lot of things about the article.

Reply: Thank you for your valuable suggestions. In our hospital, we conduct preoperative tests for patients which include HIV, treponema pallidum, hepatitis B virus and hepatitis C virus infections after admission. Some of them were not aware that they have been infected with HIV before admission and found out it during the preoperative screening. To avoid misunderstandings, we add “others were found to have HIV infection during preoperative screening” after “Fifteen patients were diagnosed with HIV before admission”.

Comments7:• Lines 193 – 194 – What is TNM, MSI, RAS, BRAF? Not a clue!

Reply: Thank you for your valuable suggestion. We apologize for not describing these acronyms in detail. MSI, Microsatellite instability. TNM, Tumor Node Metastasis. RAS, Rat sarcoma; BRAF, Serine/threonine protein kinase B-raf. We have added explanation for these acronyms in the corresponding places.

Comments: • Line 205-206 – Good finding – “we discovered that HIV-positive patients had
significantly more lymph node metastases than HIV-negative patients” – Good information to
share!!! • Line 216-218 – “However, the overall survival and progression free survival were
shorter in HIV-positive patients than in HIV-negative patients.” Also good information to
share!!!

Reply: Thanks for your recognition, these are two of the most important findings of this study.

Comments:• Line 278-279 – What is PS? What does unfavorable Duke stages mean?

Reply: Thank you for your valuable suggestions. PS is the acronym of performance status, it is used to evaluate the overall behavior and daily living abilities of cancer patients, and the higher the score, the worse the physical condition. In addition, we have replaced PS with performance status in manuscripts. Dukes stages is a pathological stage of colon cancer, which is similar to TNM stage. Dukes stages are based on the depth of tumor invasion, lymph node metastasis and distant metastasis. The higher the stage of the Dukes stages, the more advanced the colon cancer.

Comments:• Line 291 – Explain importance of FOLFOX4. What is this?

Reply: Thank you for your comment. We are very sorry that we ignored non-clinical oncology researchers like you. FOLFOX4 is the standard chemotherapy regimen for colorectal cancer, which consisted of a 2-hour infusion of leucovorin isomers (100 mg/m²) followed by a fluorouracil bolus (400 mg/m²) and 22-hour infusion (600 mg/m²) for 2 consecutive days every 2 weeks, with oxaliplatin (85 mg/m²) as a 2-hour infusion on day 1.[3]

Comments: • Line 320-321 – “Also, standard treatment protocols may (be) unavailable for this population” What does this mean exactly?

Reply: Thank you for your valuable suggestion. As I mentioned in line 305 to 306. “Chemotherapy and immunotherapy have a better safety profile during CRC treatment in patients with well-controlled HIV infection.” HIV infection may change the immune microenvironment. For CRC patients with poor HIV control, the standard chemotherapy regimen may not be appropriate for them. To avoid misunderstanding, we changed this sentence to “In addition, standard treatment protocols may be unavailable for patients who live with poorly controlled HIV infection”.

Comments: • Line 322 – What does humanistic care mean? _____

Reply: Thank you for your valuable suggestion. Sorry, there is a confused explanation. What I want to express is that clinicians should direct their attention providing patients with prompt treatment, and scientists should work more quickly to develop appropriate treatments. We have revised previous version in the manuscript.

Comments: • Line 331 – I think they men “due” and not “duo”.

Reply: Thank you for your kindly reminder, it is our negligence, we have made a correction.

Comments: • Tables – In the notes section of EACH table, the acronyms should be spelled out. I can’t really make sense of the tables without it.

Reply: Thank you for your valuable suggestion. It is our negligence. We have already spelled out all the acronyms in the notes part of each table.

Comments: • Table 2 – What does “main comorbidity” mean?

Reply: Thank you for your valuable comment. Main comorbidity includes Hypertension, Diabetes mellitus, coronary atherosclerotic heart disease and chronic obstructive pulmonary disease mentioned below. To avoid confusion, we have modified the format of all tables, we put the major items on the left and the minor items in the center.

References:

- [1]. Slusarczyk, A., et al., Oncologic outcomes of patients treated with kidney-sparing surgery or radical nephroureterectomy for upper urinary tract urothelial cancer: a population-based study. *Urol Oncol*, 2023.
- [2]. Wang, J.G., et al., Wrapping pancreaticojejunostomy using the ligamentum teres hepatis during laparoscopic pancreaticoduodenectomy: a propensity score matching analysis. *World J Surg Oncol*, 2023. 21(1): p. 356.
- [3]. Tournigand, C., et al., OPTIMOX1: a randomized study of FOLFOX4 or FOLFOX7 with oxaliplatin in a stop-and-Go fashion in advanced colorectal cancer--a GERCOR study. *J Clin Oncol*, 2006. 24(3): p. 394-400.

Reviewer #2:

Comments1: The manuscript demonstrated the necessity of establishing standard treatment procedure for HIV-positive patients with colorectal cancer. The manuscript is the first to show the differences in postoperative pathological features between patients with combination of HIV and colorectal cancer and patients with CRC alone. This manuscript discovered that HIV patients have significantly more lymph nodes metastasis than HIV negative patients. The manuscript also demonstrated that HIV patients have higher N and TNM stages than HIV negative patients. HIV positive patients have worse prognosis, hence require more attention by Clinical practitioners and treat the population more aggressively.

Reply: Thank you for reviewing the manuscript. Thank you very much for your recognition and support of our research.