-1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes

-2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? -Timeframe of this study should be mentioned as a prospective or retrospective study. -In the result, statistical values should be reported according to its 95% confidence intervals such as AUC. -In the result, the authors reported as "The new prognostic nomogram could effectively enhance the predictive value of the TNM stage system." It seems to be the authors' opinion; therefore, it should be moved to the conclusion section rather than being in the result section. Because the result should inform only outcomes that the study found. -Please state the full term of the abbreviation in the first place, for example, "NLR," and "BMI" in the result subheading.

This study should be mentioned as retrospective study. I added this.

I added the statistical values according to its 95% confidence intervals.

"The new prognostic nomogram could effectively enhance the predictive value of the TNM stage system."This have moved to the conclusion section rather than being in the result section.

#### I have stated the full term of the abbreviation in the first place.

3 Key words. Do the key words reflect the focus of the manuscript? Some keywords could not be found in the Medical Subject Headings (MeSH) (available from <u>https://meshb.nlm.nih.gov</u>): "Adenocarcinomas of the esophagogastric junction," "neutrophils to lymphocytes ratio," and "platelets to lymphocytes ratio." Changing to the appropriate term may be suitable.

#### I have change the key words.

4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes

5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? -It is unclear whether as prospective or retrospective design because the authors reported as "patients were analyzed retrospectively during the research." and "The patients enrolled had prospective follow-up." in the method. However, the authors informed that "Each patient signed an informed consent form." in ethics approval and consent to participate section. How was the informed consent to participate in the study obtained from all patients in the retrospective design, if so? -Why did exclude the patient with a previous malignant tumor? Did this study exclude the patient with a previous malignant tumor and success cure it with a low rate of recurrent? Because some malignant tumors might not be affecting the biomarkers of AEG. Exclusion might be potential for selection bias. Please give more detail on which tumors along with the timing (where applicable) were exclusion criteria. -Why did exclude the patient who died within 30 days after surgery? This study planned to use surviving analysis in which the timing of death is essential. Excluding those patients might be selection bias as well. Was this exclusion a run-in period? Please give more reasons why did exclude them. -Please avoid the term "and so

on" in "The data of patients' demographic and clinicopathological features were gathered through the medical record room of our hospital, including age, gender, BMI, tumor size, differentiation grade and so on." Please mention all of the variables that planned to collect the data. Also, same as in "The routine laboratory data are listed below: neutrophil, lymphocyte, platelet, prealbumin, albumin, hemoglobin etc." -Please check the typo of the unit in "total lymphocyte count (109/L)." The authors presented as "109/L" without superscript of the 10^9 cells per liter; therefore, it should be changed to "109/L" where the 10 power 9 of the cells per liter is superscript form. -Please define the unit of BMI in "BMI was divided into 3 groups: <18.5 (low group), 18.5 to 24.9 (normal group), and  $\geq$ 25 (high group)." -Please clearly mention the censoring in the analysis.

This is a retrospective design, and we collected the patients, patients were followed up by telephone and agreed to sign an informed consent form, then they were included in this study, and the follow up was also retrospective.

Because other malignancies may also affect neutrophil and lymphocyte counts, so previous malignancy that has not been cured was correct. I have revised this.

Patient who died within 30 days after surgery because of sudden accident such as pulmonary embolism, this will affect the prognostic risk factor. I have revised this.

I add all of the variables that planned to collect the data. I changed "109/L" to "10<sup>9</sup>", I define the unit of BMI (kg/m2). 95%CI of the C-index is 0.660-0.734.

I add the 95% CI to ensure the AUC of the new proposed model is statistically significantly greater than the AUC of the TNM staging. I divided the patients into two groups according to the total score of the nomogram (low risk: <58 and high risk:  $\geq$ 58)."

<sup>7</sup> Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear

and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? -Please use the scientific name style (use italic or underline) in case to indicate the organism such as Helicobacter pylori. -8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends? -In the header row of Table 1, "N(percentage) or Median(25%-75%)" might be changed to the other word and moved the old one to the table caption and using the symbol to indicate it. Also, "25%-75%" should be changed to the 25th percentile or 75th percentile or changed to the IQR (interquartile range) as needed. -In Table 1, it may be suitable to report the data as classified by the primary outcome (overall survival). Therefore, please divide the column as surviving or death. -In Table 1, the authors presented a continuous variable as a categorical variable. This might lose the detail and trending of the data. It should be reported as median or mean as appropriate along with categorical as needed. For example, the authors presented "ages" as "<60" vs ">=60", this might be presented as mean or median as well. Also, same as tumor size, and BMI. -In Table 1, please check the typo of the unit. The authors presented as "BMI(kg/m 2)" without superscript of the meter unit; therefore, it should be changed to "BMI(kg/m2)" where the squared form of the meter unit is superscript form. -In Table 2, please change the term "gender (men/women)" into a clear word that described what variable is to be the reference of the comparison. For example, men have the HR 1.081 in comparison to women. -Please choose the word " " (symbol in Table 1) or "beta" (in Table 2) and rewrite it into the same word for consistency. Also, the authors might be defined the full term of the beta such as "coefficient," or "log-hazard." -In Table 2, please check the hazard ratio of the albumin variable (hazard ratio = 0.479, 95% CI 0.557 to 1.008) because the hazard ratio is out-of-range of its 95% CI. -In Tables 2 and 3, please explain the asterisk symbol (\*) in the table caption. -In Table 3, please check the 95% CI of "Tumor location" because the 95% CI seems wide and the upper bound seems higher than usual (hazard ratio = 0.922, 95% CI 0.695 to 1222). -In Figure 1, the nomogram format quality should be improved such as overlapping of the text "3-years Survival Probability," and "5-years Survival Probability" and their scales, respectively. -In the legend of Figure 1, please explain how to use the nomogram (step-by-step). Also, the authors might incorporate Table 4 and Figure 1 into the same Figure for easy-to-use purposes. -In Figures 2, and 3, please adjust the scale of both axes of the calibration curves to the probability of survival to 1.0. -In Figures 4, and 5, please provide the 95% CI of ROC. -In Figure 6, please provide shading of the 95% CI for each curve. -According to the general table or figure style should be standalone by itself, some abbreviations should be defined the full term in the table caption or figure legend, such as "NLR," "PLR," and "PNI" in Tables 1, 2, 3, and 4, Figure 1. -The authors might consider presenting the study flow diagram for clarity as a supplementary file. -

"25%-75%" have changed to the 25th percentile or 75th percentile.

I have divide the column as surviving or death in the table 1.

I presented a continuous variable as median with 25th percentile and 75th percentile.

BMI(kg/m 2) have change to BMI(kg/m 2).

I defined the full term of the beta as "coefficient"

I revised the hazard ratio of the albumin variable.

\* indicating the index is significant

Tumor location is deleted form table 3 because this is not significant in the table 2.

In Figure 1, the nomogram format quality have be improved.

To apply the nomogram, a vertical line should be delineated to the point row to assign point values for each variable. Next, the corresponding points are summed to get the total points. Finally, a vertical line from the total points needs to be drawn to gain the value of 3- years and 5-years survival probability.

-In Figures 2, and 3, please adjust the scale of both axes of the calibration curves to the probability of survival to 1.0. I have changed this -In Figures 4, and 5, please provide the 95% CI of ROC. -In Figure 6, please provide shading of the 95% CI for each curve. I have changed this.

some abbreviations have be defined in the table1 and 2,3.

#### I add the study flow diagram for clarity as a supplementary file..

9 Biostatistics. Does the manuscript meet the requirements of biostatistics? -According to the clinical prediction design, the TRIPOD (Transparent Reporting of a multivariable prediction model for Individual Prognosis Or Diagnosis) reporting guideline suggested that an internal validation is a necessary part of model development. Please add the internal validation method and an optimistic estimate of performance in the method section and also report it in the result section. (Ann Intern Med. 2015;162:W1-W73. doi:10.7326/M14-0698 mentioned as "Studies developing new prediction models should therefore always include some form of internal validation to quantify any optimism in the predictive performance (for example, calibration and discrimination) of the developed model and adjust the model for overfitting. Internal validation techniques use only the original study sample and include such methods as bootstrapping or crossvalidation. Internal validation is a necessary part of model development.") -How did the authors handle the missing data? Please describe the method of handling. Whether exclude the patient having incomplete data from the study, if so, please mention in the exclusion criterion section. If the authors included the patient having missing data, please report the missing rate of the data in the results. -Please provide the

detail on how to check whether a violation of the proportional hazard assumption. -Please provide more detail of the statistical software. For example, IBM SPSS Statistics version 16 (IBM Corp., Armonk, NY, USA). Moreover, it might give the special package of the statistical software used in the analysis for reproducibility. -The author stated that "P values of variables less than 0.05 in univariate analysis were included in the multivariate analysis." According to the TRIPOD reporting guideline, those method seems faulty. TRIPOD stated the following "Predictor Selection During Modeling. One approach to predictor selection is to fit a model by choosing predictors on the basis of the strength of their unadjusted (univariable) association with the outcome that is to be predicted, or to preselect predictors before the multivariable modeling. The reasoning is that predictors with limited predictive value, based on nonsignificant univariable predictor-outcome association, can be dropped. Although quite common, that strategy is 'not recommended' as a basis for selecting predictors, because important predictors may be rejected owing to nuances in the data set or confounding by other predictors. Thus a nonsignificant (unadjusted) statistical association with the outcome does not necessarily imply that a predictor is unimportant. However, if done, univariable predictoroutcome analyses should be reported, including the selection criteria (for example, significance level), and sample size (including the number of events) for each of the univariable analyses, because it is a form of predictor selection." -Please explain how to select the variables in the full multivariable model to be in the reduced (final) model including backward elimination or forward selection (where applicable). -Please provide the sample size estimation in the method. -Please state the level of statistical significance in each statistical analysis such as a p-value of less than 0.05 is considered statistically significant.

The all univariate analysis were included in the multivariate analysis, and the result is also same as the result of "P values of variables less than 0.05 in univariate analysis were included in the multivariate analysis".

External validation is added.

the patient having incomplete data has been dded in the exclusion criterion.

survival analysis was compared using Kaplan – Meier, Nomogram construction using R packages "rms", "Hmisc", "lattice", "Formula" and "foreign".

Due to the limitations of both the forward method and the step-by-step method, the backward method is more commonly used now. In order to make the model more concise for clinical use, we used the back-off method for variable screening based on the goodness of fit (chi-square statistic) minus two degrees of freedom greater than zero without affecting the accuracy of the model. P<0.05 was significant.

-10 Units. Does the manuscript meet the requirements of use of SI units? Yes -

-11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? Please recheck about reference format. -Reference 1 "Kumamoto T, Kurahashi Y, Niwa H, et al. True esophagogastric junctionadenocarcinoma: background of its definition and current surgical trends. SurgToday. 2020;50(8):809-814." The journal abbreviation is not having the space between the words. It should be "Surg Today."

## I have changed this.

12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? English style and grammar should be improved throughout a manuscript. Please state the full term of the abbreviation in the first place, for example, "BMI" in the method section

#### I have polished this manuscript.

#### I state the full term of the abbreviation in the first place.

-13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement -Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? -According to the clinical prediction design, the TRIPOD (Transparent Reporting of a multivariable prediction model for Individual Prognosis Or Diagnosis) reporting guideline should be followed. Please state that this manuscript conforms to the TRIPOD guideline (where applicable) in the method section.

### I add this.

-14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review committee. Did the manuscript meet the requirements of ethics? Yes.

#### Reviewer2

1- All abbreviations showed be clarified when mentioned for the first time. 2- The manuscript requires linguistic and grammatical corrections, the sentences are too long. 3- Page 4, line 9: please remove the word "important" all organs are important, there is no important and not important organ. 4- Page 4, line 11: "1) Previous malignant tumors or various primary tumors". Please rewrite this sentence; it is not clear. 5- Page 4, line 20, remove the word "so on" and add all the data required. 6- Please add the significance of the ROC curve for both TNM and nomogram scoring. 7- There is significant plagiarism between this manuscript and <a href="https://doi.org/10.3389/fonc.2020.00583">https://doi.org/10.3389/fonc.2020.00583</a> "A Simple Model Established by Blood Markers Predicting Overall Survival After Radical Resection of Pancreatic Ductal Adenocarcinom" So the manuscript should be totally modified. 6- in page 6 line 17: "the area under the curve (AUC) of the nomogram was sharply larger than the TNM stage," the difference cannot be described as a "sharply", as it is [0.630 and 0.720]. 8- The abstract is not informative enough. 9- Tumor location was included in the multivariate analysis though it did not achieve significant value in the univariate analysis.

All abbreviations showed be clarified when mentioned for the first time. I have added this

### The manuscript have linguistic and grammatical corrections

Page 4, line 9: please remove the word "important" all organs are important, there is no important and not important organ. 4- Page I have revised this.

Page 4, line 11: "1) Previous malignant tumors or various primary tumors". Please rewrite this sentence; it is not clear. I have revised this.

Page 4, line 20, remove the word "so on" and add all the data required. I have add the data.

6- Please add the significance of the ROC curve for both TNM and nomogram scoring. I add this.

There is significant plagiarism, I have revised this.

"the area under the curve (AUC) of the nomogram was sharply larger than the TNM stage," the difference cannot be described as a "sharply", as it is [0.630 and 0.720]. I have revised this. The abstract is not informative enough. I have added this. Tumor location was included in the multivariate analysis though

it did not achieve significant value in the univariate analysis.

I have change this.

#### (1) Science editor:

This retrospective study established a simple model of blood markers predicting overall survival after radical resection of type II and type III AEG, which had some significance to the clinical field. However, the manuscript still has some problems that can be further improved. The writing structure and writing sentences of this manuscript are very similar to that of another article "<u>https://pubmed.ncbi.nlm.nih.gov/32426277/</u>", which needs to be improved. There is still a lot of room for improvement in the modeling and testing methods. The form of the table in the article should adopt the form of a three-line table. There is some overlap between the text and the lines in Figure 1. Language Quality: Grade C (A great deal of language polishing)

Scientific Quality: Grade D (Fair)

# I have polished this manuscript and revised the overlap.

## (2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Surgery, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines

and do not segment cell content. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

I have revised and give standard three-line tables