Journal Name:	Journal of Advances in Medicine and Medical Research
Manuscript Number:	Ms_JAMMR_114777
Title of the Manuscript:	Exploring Prognostic Factors and Survival Rates in Prostate Cancer Patients: A Comprehensive Retrospective Analysis (2009-2018)
Type of the Article	Original Research Article

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct
		the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments		
Is the manuscript important for scientific community? (Please write few sentences on this manuscript)	If properly conducted, the manuscript might be important for the scientific community, especially in Brazil.	
2. Is the title of the article suitable? (If not please suggest an alternative title)	The title can be improved, especially a review of the use of prognostic factors. Perhaps, determinants of survival might be a more suitable phrase.	
3. Is the abstract of the article comprehensive?		
4. Are subsections and structure of the manuscript appropriate?		
5. Do you think the manuscript is scientifically correct?	3. The abstract is very difficult to understand. Several undefined abbreviations were introduced (CACON, MG, PC, CP, SUS). The methods section could be significantly improved. The results section needs complete overhaul, as it does not convey any	
6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.	information about the results obtained in the study.	
(Apart from above mentioned 6 points, reviewers are free to provide	4. I will suggest that the authors strictly follow the STROBE guideline for the reporting of the article.	
additional suggestions/comments)	5. I do not think that the manuscript is scientifically correct. A lot of conclusions had been made based on unclear statistical methods, poorly-defined patient selection methods, and very unclear variable definitions and extraction. 6.	
	Other major concerns Overall, this is a poorly conceptualized and poorly written article. The introduction contains lots of information which I consider irrelevant, meanwhile, the fist two paragraphs of the discussion appears better suited for the introduction. Otherwise, it's a repetition of similar information in both the introduction and discussion sections. What does this statement "Provide a factual background, clearly defined problem, proposed solution, a brief literature survey and the scope and justification of the work done." mean and what's its relevance in the last paragraph of the introduction?	
	-In the materials and methods section (under subsection "Development") the authors wrote "Patients who remained alive until the end of the study were censored by the date of the last record in the medical record, and those who had their participation in the study interrupted (patients lost during the study) contributed to the calculation of survival until the last date recorded in the record." What was the outcome event of interest? How exactly was the outcome event defined? For example in this statement, what do the authors mean by "patients lost during the study"? Was it lost to follow-up, migration outside the study area, referral to other hospitals, or death?	
	-"which identifies previous records of subjects describing interventions received and follow-up since the time of these records, in the period from 2009 to 2018, with follow-up until 2020," What are the follow up dates exactly? These dates need to be clearly stated.	
	-How was information extracted from the medical records? Was there a proforma or questionnaire? Was the data extraction instrument pre-tested?	
	-" The studied variables were stratified according to the cutoff points (36, 48 and 60 months), after diagnosis, based on the literature, and analytically and descriptively demonstrated through survival curves." This statement need to be referenced.	

- How was the TNM staging classified? Was it based on clinical staging or histo-pathological staging? Using ambiguous term like anatomopathological staging does not offer any clarity in this regard. It is unclear how the staging was determined specifically.
- -If the outcome event is PC mortality, how was this information confirmed? From which record was this information obtained? Are the analyses based on PC-specific or all-cause mortality?
- In the log-rank tests, what was the p-value cut-off point for selecting variables for inclusion in the multivariable model?
- When using Cox Proportional Hazard model, a number of assumptions has to be proven to have been fulfilled, otherwise the test would be invalid. How was the proportionality assumption tested in this study, and what was the result?
- -The authors did not mention how missing data was handled. How many missingness were there for each of the variables as your tables clearly show that add up to the total included study participants.
- -In the results section
- All percentages should be accompanied by the actual number of patients to give readers a better context of the proportions quoted.
- The footnotes of tables 1 and 4 convey no meaning as they do not link up with any identifier in the tables.
- It appears the information in table 2 was used to report the estimated survival for the patients. First, I don't think that log-rank test is sufficient to make those inferential assessments. Secondly, the table is very poorly done as the figures 95%CI for all the variables are laterally inverted.
- Figure 1 is very poor and difficult to read. Since the authors mentioned that survival was determined using the Kaplan-Meier method, it is important to add the risk tables to each of the variables examined, as well as the confidence intervals for each of the plot estimates. (If such confidence intervals can not be added on the graphs (which I strongly suggest it should), probably the confidence intervals could be provided in a separate table and attached as a supplementary material.

Actually, it appears that the information contained in Table 2 are the exact same information in the Kaplan-Meier plots. This is really not clear at all.

- -Can the authors also give us information about the mortality rate and the cumulative mortality in this cohort? At the very basic level, what proportion of the patients was alive, dead, or lost to follow up during the study period?
- Are the reported HRs adjusted or unadjusted? If adjusted, what are the variables adjusted for and how were these variables selected?
- The authors mentioned "final model" in their results. What are variables contained in this final model? Was there any test done to confirm the goodness-of-fit of the final model? If yes, the result of such test should also be reported.
- In tables 4 and 5, why stages I and II collapsed into one category to make the reference category when you have reported each of the stages separately until this point?
- Estimates should be rounded up to consistent number of decimal places. If the journal does not have preferred format, it should be rounded up to maximum of two places.
- In table 5, the authors reported the HRs in thousands (e.g. "1,282") but reported the corresponding CIs in decimals (e.g. (0.7417-2.214)). How did they arrive at these estimates?
 - In the discussion section
 - What are the main findings of this study?
 - There was a reharshal of several points already mentioned in the introduction here. As well as a lot of unimportant data that does not follow any line of argument in the discussion.
 - There are many unreferenced statements as well e.g. "In that study, the biochemical recurrence rate was found in 21.6% of the sample, while in other studies this rate was 11.90%."
 - Information about the strengths and limitations of the study were very limited and poorly described.

	 Why was ethical approval discussed in two different sections? I suggest a major revision of the discussion and the concluding sections. 	
Minor REVISION comments		
Is language/English quality of the article suitable for scholarly communications?	The language can be significantly improved. There was no thorough job to look at the punctuations, spellings, and other language errors in the article.	
Optional/General comments	 It is important to maintain consistency in the abbreviations all through the article. If you decided to abbreviate prostate cancer as PC, it's good to maintain this rather than shifting frequently between the full and abbreviated formats, including another one CP. In the abstract, kindly define the abbreviations already so that readers can clearly understand the article. Several undefined and poorly defined abbreviations are also in the main text of the article (RHC's, LHRH, EC, CE, CP12, CSD etc) The authors should be consistent in their terminologies. They have used prognostic markers, prognostic variables, and prognostic factors, and also risk ratio and hazard ratio interchangeably. Prognostic marker is not exactly the same as prognostic factors. 	

PART 2:

		Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	Idris Ola
Department, University & Country	German Cancer Research Center, Heidelberg University, Germany