REVIEWER RESPONSE-MANUSCRIPT Cells-468516

“A role of ZNF143 on cell survival through the NAD (P)H quinone dehydrogenase 1-p53-Beclin 1 axis under metabolic stress in breast cancer cells” by Rome Paek A et al

Authors deeply analysed the survival rate of ZNF143-reduced breast cancer cells and underlying mechanisms like autophagy, p53, proteasome activation. They analyzed also mRNA-ZNF143 correlation with malignancy in patients.

The topic is important because to characterize breast cancer cells and their survival is crucial to orient a successful therapy. However, in my opinion, the huge amount of data provided must be better commented in the Discussion to make understandable the meaning of this study.

Unfortunately, the manuscript is unacceptable in the present version and must be ameliorated as suggested:

**TITLE:** PLEASE SHORT THE TITLE ACCORDING TO “A role of ZNF143 on breast cancer cell survival through the NAD(P)H quinone dehydrogenase 1-p53-Beclin1 axis under metabolic stress”

**ABSTRACT:** At line 39 enlarge the text according to: “the p53-Beclin1 axis, so corroborating the necessity of blocking autophagy for the best therapy.”

**INTRODUCTION:** At line 52 insert the meaning of ZNF143 in extenso. At line 69 also BUB1B, TFAM, GPX1…must be inserted in extenso and then put in brackets.

At line 82 after the word “deprivation”, please put a point. Then start a new sentence as “Furthermore, we identified the regulatory mechanism involved…”

**MATERIALS AND METHODS:** At line 180 delete in the subtitle 2.10 “by flowcytometry”.

**RESULTS:** From line 197 to line 205 all sentences are in a wrong position, you can insert them in the Introduction. The Results may start with the sentence “Here, we first investigated if MCF7 breast cancer cells showed a difference in survival if devoid of ZNF143 when stressed.”

At lines 217-222 the sentences must be rewritten as “The ZNF143 knockdown effect on cell survival reached a maximum in FBS-free and glucose-free media, which was reversed by chloroquine, an autophagic flux inhibitor, (Figure 1D) but not by wortmannin, an inhibitor for phosphoinositide 3-kinase (PI3-kinase) (Figure 1E). Because chloroquine inhibits autophagy by increasing lysosome pH [10, 31], the ZNF143 knockdown effect on survival might result from the autophagic process, downstream of PI3-kinase.”

At line 235 Substitute in subtitle 3.2 the words “results in more” with “enhances”. Line 237-238 rewrite the sentence according to “Numerous autophagic vacuoles were observed in MCF7 sh-ZNF143 cells versus sh-Control cells in growing condition”.

Move from line 281 to line 278 the sentence “The p53 was shown to be degraded through an MG132-dependent pathway involving proteasomes.”

Line 301 delete too many technical informations on data analysis like “DAVID functional annotation bioinformatics…”and eventually put them in Methods sections.
DISCUSSION: In line 354 rewrite the sentence according to: “Taken together, our results suggested that reduced ZNF143 played a role as a regulator for breast cancer malignancy and that autophagy is deeply associated to its survival.”

Please enlarge and focus better Discussion text with Results but avoid to insert Figures number here and to merely repeat already described results.