Dear, Editor-in-Chief

We are submitting a research article of "Prediction of PIK3CA mutations from cancer gene expression data” written by Jun Kang. The article is submitted to be considered for publication as an original article in the PLOS ONE.

In this manuscript, we tried to build a PIK3CA mutation prediction model from gene expression data. PIK3CA inhibitors are used for patients with breast cancer having a PIK3CA mutation. The machine learning approach can help to find breast cancer patients who will benefit from the PIK3CA inhibitors. We adopt a machine learning approach that had been developed by The Cancer Genome Atlas Research Network. Our model shows good prediction performance with 0.84 test set AUROC. We believe our findings are meaningful in terms of building baseline research data for building a machine learning model as a biomarker.

The manuscript has been written according to the guidelines provided by the PLOS ONE. This or similar material has not been previously published and will not be submitted by me or my colleagues to any other publication before its appearance in the PLOS ONE.

Thank you.

With regards,

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