Review of: "Interpreting the loss functions of Artificial neural networks in cancer research"

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Potential competing interests: No potential competing interests to declare.

1. The phrase "cancer research" in the title of the article is just a slogan. Because they did not mention any examples of cancer research in which the author used artificial neural network

2. Every Artifical neural network contains a lot of nodes and neurons, which are connected layer by layer through weights. Based on the type of connections we have two type of networks: Feed Forward and Recurent neural networks, which should have been mentioned in the article.

3. The components of artifical neurons are: inputs, outputs, sum function and activation function. It would have been better if these were introduced using a diagram or formula. In general, the artificial neural network has complex concepts and theories and requires the use of computing software, which unfortunately is not mentioned in this article.

For example see:

Haykin, S. (1994). *Neural Networks. A Comprehensive Foundation*. New York: Macmillan College Publishing Company.

Or : Hagan, Demuth and Beale (1996), Neural Network Design

4. In the conclusion it was written: "The Mean Squared Error (MSE) and Root Mean Squared Error (RMSE) are used in regression tasks, while Cross-Entropy (CE) is often used in classification tasks". This is very obvious (and do not need to a writting article). What is important is what is your main variable in the diagnosis of cancer. If the author worked with the data, the main variable would be known and there was no need to introduce both types of loss function.

5. Overall, considering the above weaknesses, I do not have a positive opinion on accepting this article