

Development of machine learning models for the prediction of the skin sensitization potential of cosmetic compounds

This study provides a new breakthrough in the use of artificial intelligence in clinical research by reducing the use of experimental animals in clinical trials, related to the awareness of researchers in various parts of the world regarding animal welfare. So that the development of the latest technology and the accumulation of toxicity and efficacy test data make it possible to predict the toxicity of target substances without using experimental animals.

1. However, it is necessary for authors to explain the consideration of using 60% data for the training data set while 40% is for the testing data set.
2. Authors are also expected to provide an explanation of the limitations found in this study, what is the ideal sample size, what kind of accurate interpretation is expected and also whether there are problems in determining pre-hapten or hapten in various cosmetic ingredients that were tested in this study.