Abstract

In recent years, the statistics presented increased incidence rate of breast cancer, while early detection in early stages considered one of the highest healing rates and also role of prevention in reducing risk by avoiding causes of incidence that associated with risk factors. as well as, The soft computing approaches have been used widely in solving health care problems by modeling to the behavior of experts. For these reasons and others, we presented in this paper the proposed method is designing a risk assessment tool to prevention and early detection of breast cancer based on-demographic risk factors (DRF) by using neuro-fuzzy system technique (NF), in order to solve the main problem for this research and help doctors or patients in the risk assessment of incidence. This method consisted of three stages (statistical study, prepare data and design of the assessment model using NF by two approaches, In the second approach which uses the FCM algorithm with NF technique, was proposed to improve the first approach, which used NF technique. also achieved a higher accuracy for results than the other tools (Gail,IBIS). Where rate of success for the proposed tool is 94%. In addition, used MATLAB 2013 to programming and testing the proposed method.
References


Index Terms

Computer Science          Artificial Intelligence

Keywords