Internatioanal Conference on
Orphan Drugs and Rare Diseases
March 16-17, 2020 | Berlin, Germany

Abstract Template

Title: Hybrid Metaheuristic Approach for Diagnosing Breast Cancer from the Medical Database

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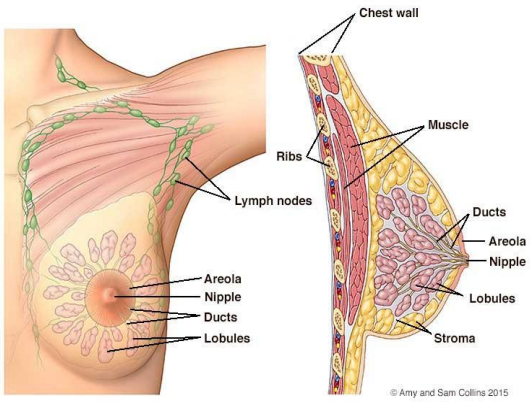
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Keywords: Breast cancer, Neural network, Fuzzy logic, Genetic algorithm

I. Abstract Body

Statistics of standard health organizations shows that the breast cancer is subsequently a critical setback to the human that create more death rates. The medical analysis is mostly established on data received from various sources along with results of medical examination, patient previous records and other different information that physician consider in order to accomplishing a final diagnostic decision making. Numerous studies have conveyed that a large number of people with breast cancer are undiagnosed due to uncertainty of medical data that contains redundant, incomplete, obscure and unpredictable. The intention of this research is to propose a hybrid metaheuristic approach which includes neural network, fuzzy logic techniques and genetic algorithm to diagnose breast cancer and its types. Neural network and fuzzy logic techniques utilized to diagnosing breast cancer and categorize the types. Genetic algorithm applied to compute the best fitness value of evaluating the diagnosing accuracy. The overall diagnosing result from this study scored very high which is 96.43 % accuracy. The innovative hybrid metaheuristic approach can serve as a supportive tool to help medical experts and to teach medical students and nurse for diagnose breast cancer diseases and to increase the human life time.

II. Image:



III. Reference:

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IV. Biography:

Dr. Gunasekar Thangarasu is currently working as a Head of Department (PRIDE), Mahsa University (Malaysian Allied Health Sciences Academy), Malaysia. He has completed his PhD in the field of Information technology, University Technology PETRONAS, Malaysia. He has published more than 20 papers in reputed journals and has been serving as an editorial board member, reviewer and technical committee member for various renowned journals and conferences. His research interest includes artificial intelligence, data science, blockchain technology and IoT using bio-medical datasets. In addition, he has vast experience in software development in developing client-server based software using the latest technology tools such as PHP, ASP.NET with SQL-server 2016 back end.

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