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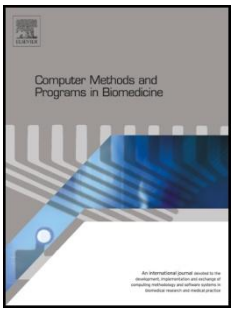

Title: Risk Analysis of Lung Cancer and Effects of Stress Level On Cancer Risk Through Neuro-Fuzzy Model

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PII: S0169-2607(15)30246-7
DOI: http://dx.doi.org/doi: 10.1016/j.cmpb.2016.09.002
Reference: COMM 4248

To appear in: *Computer Methods and Programs in Biomedicine*

Received date: 8-10-2015
Revised date: 21-7-2016
Accepted date: 2-9-2016

Please cite this article as: A. Yılmaz, S. Arı, Ü. Kocabıçak, Risk Analysis of Lung Cancer and Effects of Stress Level On Cancer Risk Through Neuro-Fuzzy Model, *Computer Methods and Programs in Biomedicine* (2016), http://dx.doi.org/doi: 10.1016/j.cmpb.2016.09.002.

Risk Analysis of Lung Cancer and Effects of Stress Level On Cancer Risk Through Neuro-Fuzzy Model

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ARTICLE INFO

Article history:

Received: 08 October 2015
Accepted

Keywords:
Neuro-Fuzzy logic
Cancer
Risk, Analysis
Lung Cancer
Stress
Early diagnosis

ABSTRACT

Significant number of people pass away due to limited medical resources for the battle with cancer. Fatal cases can be reduced by using the computational techniques in the medical and health system. If the cancer is diagnosed early, the chance of successful treatment increases. In this study, risk of getting lung cancer will be obtained and patients will be provided with directions to exterminate the risk. After calculating the risk value for lung cancer, status of the patient's susceptibility and resistance to stress are used in determining the effects of stress to disease. In order to resolve the problem, the neuro-fuzzy logic model has been presented. When encouraging results are obtained from the study; the system will form a pre-diagnosis for the people who possibly can have risk of getting cancer due to working conditions or living standards. Therefore; this study will enable these people to take precautions to prevent the risk of cancer. In this study a new t-norm operator has been utilized in the problem. Finally, the performance of the proposed method has been compared to other methods. Beside this, the contribution of neuro-fuzzy logic model in the field of health and topics of artificial intelligence will also be examined in this study.

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Comment [A1]: Author: There are two different Abstract provided, and the one in the manuscript has been retained. Please check and confirm it is correct.