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# PREDICTING CERVICAL CANCER USING MULTIPLE MACHINE LEARNING TECHNIQUES

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### ABSTRACT

Now a day, cervical cancer is the most common and prevailing gynecologic malignancies. Cervical cancer is the third type of cancer after breast and lungs cancer in women. Although its highly preventable disease provided early screening is done so as to minimize the global burden. However, due to unawareness, ignorance, lack of medical facilities and expensive procedures in developing countries, the vulnerable patient populations cannot afford to undergo examination regularly. A novel ensemble approach is presented in this paper to predict the risk of cervical cancer using machine learning approach. In this paper, we proposed a prediction model that can predict with accuracy the presence or absence of cervical cancer from as many as 35 possible risk features recorded for each woman. As per the results, the proposed approach is accurate, scalable and practical

Keywords: Cervical cancer, Diagnosis, prediction, imbalance.

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### 1. INTRODUCTION

Cancer is a generic term for a large group of diseases that can affect any part of the body and at times could take the life of patients. Cancer can be reduced if cases are timely detected and treated as early as possible [1]. Cervical cancer is a common type of cancer prevailing in women these days. Women especially in developing countries, there are so restricted resources. Additionally, sometimes patients do not take care to routine screening. Therefore, the most important problems during diagnosis are determination of the finest screening plan and estimation of individual risks of each patient. In most of these screening methods results have been highly correlated with the experience of the physician and its subjective decision [2]

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