# Abstract

A widespread global health concern among women is the incidence of the second most leading cause of fatality which is breast cancer. Predicting the occurrence of breast cancer based on the risk factors will pave the way to an early diagnosis and an efficient treatment in a quicker time.

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# 1. Introduction

The World Health Organization reported in 2018 that there were 627,000 deaths worldwide due to breast cancer (Ramachandran, Girija & Bhuvaneswari, 2014). Breast cancer is the second most common cancer death among women, especially in developing countries. This cancer type accounts for 25% of all cancers among women and affects 10% of women globally at some stage of their life (Huang et al., 2017). This is a more common issue in developing countries where the mortality rate is greater due to the prohibitive cost incurred for extensive diagnostic tests and treatments required to treat breast cancer completely.

American Cancer Society statistics exhibited that there will be about 252,710 new patients with invasive breast cancer and 63,410 patients with in situ breast carcinoma that are expected to be diagnosed among US women in 2017 (American Cancer Society, 2016).

# 2. Background and related research

The risk prediction model ………………….

# 3. Research Questions (If any)

The following research questions are suggested for each of the research objective as highlighted as follows.

# 4. Aim and Objectives

The main aim of this research is to propose a ………………………………. The identification of the breast cancer ………….

The research objectives are formulated based on the aim of this study which are as follows:

* To analyze the pattern and relationship between the risk factors ………….
* To suggest a suitable balancing technique …………..
* To compare between the predictive models ……………..
* To evaluate the performance of ……………….

# 5. Research Methodology

Methodology deployed involves key processes such as the selection of target data, pre-processing the chosen data, transforming the data into a structured and comprehensible format, balancing the dataset, implementing supervised learning techniques and evaluating the machine learning performance using evaluation measures. These steps …………………………..

# 6. Expected Outcomes

# 7. Requirements / resources

# 8. Research Plan

# References

**Refer: Harvard Referencing Guide**