

Topic: Predictive Analysis of Breast Cancer Diagnosis Using Clinical and Morphological Features

Objectives:

1. **To analyze the relationship between morphological features (e.g., radius, texture, perimeter, and area) and breast cancer diagnosis:** This objective involves examining how various cell characteristics, such as size and shape, correlate with benign (B) or malignant (M) tumor classifications.
2. **To develop a predictive model for breast cancer diagnosis using clinical features:** Using statistical and machine learning techniques, this objective focuses on building a model to classify tumors as benign or malignant based on features like mean, standard error, and worst-case values of radius, texture, and compactness.
3. **To identify the most significant predictors for distinguishing between benign and malignant breast tumors:** This objective aims to determine which specific morphological features (e.g., smoothness, symmetry, concavity) have the greatest influence on the model's ability to correctly classify tumor diagnoses.